PLANNING A BATTALION DEPLOYMENT/FIELD TRAINING EXERCISE (FTX)

Subcourse Number IN0772

EDITION A

United States Army Infantry School
Fort Benning, Georgia 31905

2 Credit Hours

Edition Date: January 1993

SUBCOURSE OVERVIEW

This subcourse is designed to teach you how to develop a tentative movement plan for a battalion deployment, how to determine resources and requirements for the deployment and to develop a field training exercise (FTX) and a live fire platoon situational training exercise (STX).

There are no prerequisites for this subcourse.

This subcourse reflects the doctrine which was current at the time it was prepared. In your own work situation, always refer to the latest publications.

The words "he," "him," and "men," when used in this publication represent both the masculine and feminine genders unless otherwise stated.

TERMINAL LEARNING OBJECTIVE

ACTION:	Develop a tentative movement plan for a battalion deployment, determine resources and requirements needed to conduct the movement, develop a battalion FTX and a platoon live fire STX.
CONDITIONS:	Given the information contained in this subcourse.
STANDARDS:	You must correctly answer 70 percent or more of the multiple-choice questions contained in the subcourse examination.

TABLE OF CONTENTS

LESSON 1

PLANNING A BATTALION DEPLOYMENT/FTX

OVERVIEW

TASK DESCRIPTION:

This lesson requires that you learn, and demonstrate an understanding of what a movement plan is, the duties of key personnel, the various types of movement plans, movement orders/directives, categories of movement and cargo. You will learn what a well written plan contains, how to develop it, how to prepare road movement graphs, tables and overlays and strip maps. You will also learn how to determine resources and requirements needed to conduct a battalion deployment.

LEARNING OBJECTIVE:

ACTION:	Develop a tentative battalion movement plan and determine the resources and requirements needed to conduct a deployment.
CONDITION:	Given the information contained in Lesson 1.
STANDARDS:	You must correctly answer 70 percent or more of the questions concerning the lesson material contained in the subcourse examination.
REFERENCES:	The material contained in this lesson was derived from the following publications: ARTEP 7-8 MTP, FM 101-5, FM 101-10-1, FM 25-100, FM 25-101 and FM 25-4.

INTRODUCTION

The ability of the commander to move his unit is a very important part of his command responsibility. The ability to get from one place to another will be a vital factor in any future conflict.

PART A

MOVEMENT PLANS

1. General. A movement plan provides the commander with necessary information and a list of required actions for moving from one place to another. The plan must be comprehensive, detailed for quick implementation, require little, or no decision making, and contain a minimum amount of assumptions.

2. Key Personnel Responsibilities.

a. Unit Movement Officer (UMO).

(1) Prepares and maintains movement plans and SOPs.

(2) Periodically reviews plans and SOPs to ensure conformity with directives of higher headquarters, and to determine if they meet requirements generated by changes in personnel or equipment.

(3) Recommends changes to unit plans and SOPs when appropriate.

(4) Prepares or maintains documentation required for unit movements.

(5) Prepares or maintains unit load plans.

(6) Maintains liaison with higher headquarters and support activities on unit movements.

(7) During alerts, relieves the unit commander of as many of the preparatory duties as possible, especially those requiring the commander's absence from the unit area.

(8) Handles all arrangements for unit movement.

(9) Maintains COMPASS and updates as required.

b. Installation Transportation Officer (ITO).

(1) Assists the UMO with guidance and technical data.

(2) Provides technical assistance to units.

(3) Obtains routing approvals for the move to the airhead, railhead, or water terminals.

(4) Coordinates the procurement of blocking and bracing material (BBM).

(5) Assists in load team training.

(6) Inspects the commercial carriers equipment for damage and suitability.

(7) Procures DOD/commercial transportation assets, i.e., railcars, aircraft, etc.

(8) Coordinates with commercial carriers.

(9) Coordinates with other installations for support, rest stops, etc.

3. Types of Movement Plans.

a. Preparation for Overseas Movement (POM): POM is envisioned as an administrative overseas deployment by either air or surface transport mode. All unit equipment, supplies, and CTA items essential to accomplishing the unit mission will be included. All units require POM plans.

b. Prepositioning of Material Configured to Unit Sets (POMCUS). POMCUS is the prepositioning of equipment overseas. This type of move is used with REFORGER type units. Ideally, all equipment is already placed in the overseas area; but realistically, some equipment must be transported with the unit.

c. Reserve Component - This applies to the mobilization of ARNG and USAR units. This plan covers the movement from the unit's home station or equipment storage area to a mobilization station.

d. Tailored - This applies to tactical movements of units assigned specialized operations or contingency plans. Planning requirements will be established in the tasking directive issued by HQ FORSCOM or other appropriate headquarters.

4. Movement Orders/Directives.

a. Warning Order - An order issued through command channels as an advance notice that an organization is to be moved. It usually is issued, as time permits, approximately 250 days in advance of the readiness date.

b. Movement Directive - The basic document published by the Department of the Air Force, or jointly, which authorizes a command to take action to move a designated unit from one location to another.

c. Movement Order - Movement orders are published by the responsible headquarters upon receipt of the movement directive from the Department of the Army. They specify the exact organizational structure of the unit to be moved and also furnish other information essential to the unit commander in preparing his unit and moving it to its destination. The movement orders are the implementing documents forwarded to the unit commander authorizing him to move his unit.

5. Categories of Overseas Movement.

a. CATEGORY A - Movement from home station with all personnel and equipment which are authorized the unit as prescribe by Table of Organization and Equipment (TOE), Modified TOE (MTOE), or Table of Distribution and Allowances (TDA), as applicable.

b. CATEGORY B - Move from home station with minimum essential equipment (MEE) in accordance with AR 220-10, appendix D. MEE is equipment needed to preserve the integrity of the unit during movement without regard to combat or service support mission.

c. CATEGORY C - Move with less than MEE. Guidance provided in movement directive.

6. Categories of Cargo. To properly prepare movement plans the UMO or commander must know the different types of cargo category. This information is vital if the unit is to be moved in an efficient manner. Once categorized, the cargo designated To Accompany Troops (TAT) will be marked with a circle or disk as described below.

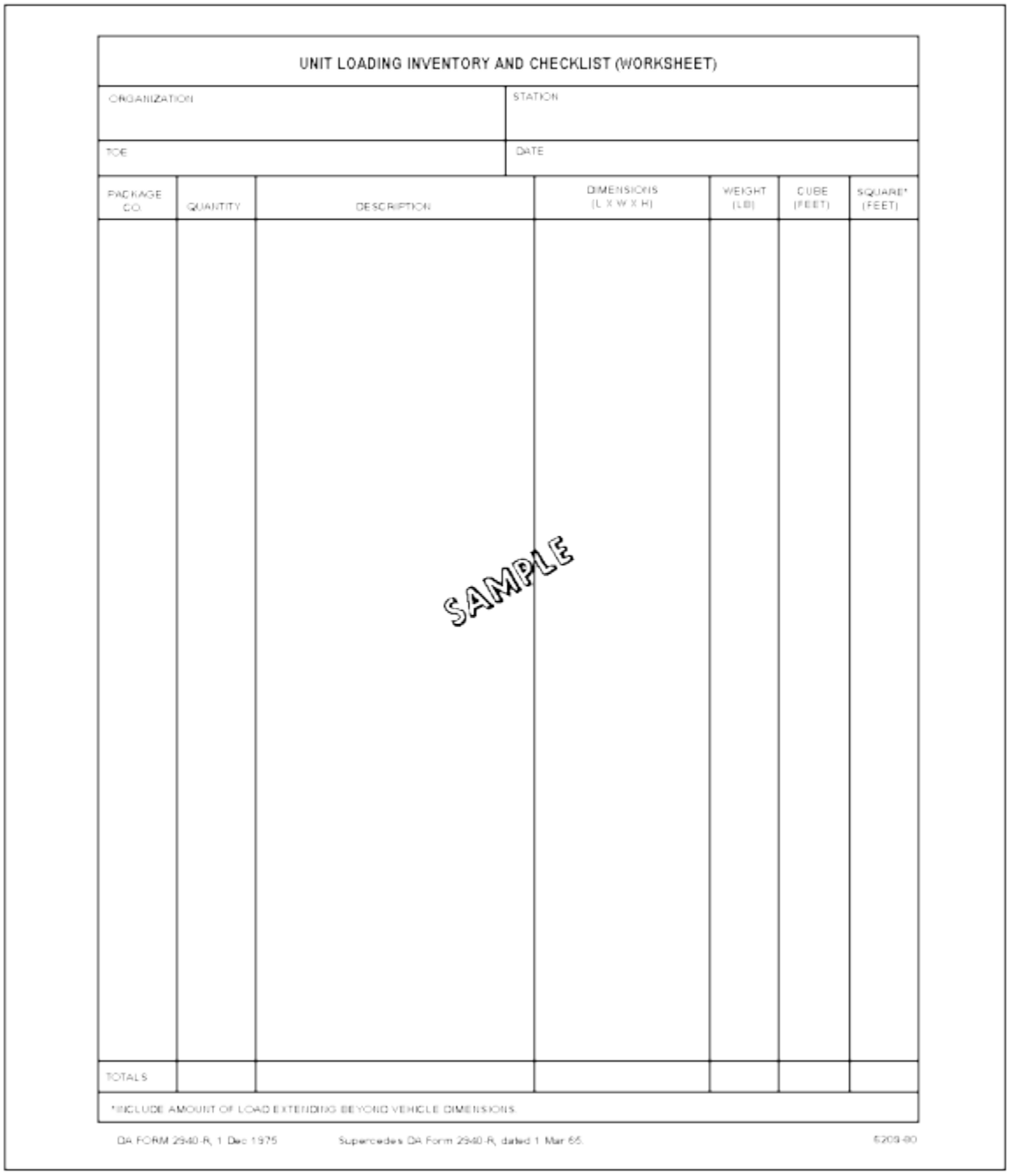
a. Red Disk TAT: Equipment and supplies essential to the administration of the unit and maintenance of personnel upon arrival at destination, but not needed en route. This equipment must arrive at the destination no later than the unit. Examples are tents, bulk rations, POL products, ammo, protective clothing, etc.

b. Yellow Disk TAT: Those items which must be accessible at all times from origin to destination. Examples are CTA 50-900, weapons, other equipment/supplies required for health and welfare of personnel and unit administration during movement.

c. Category Z Equipment: Includes mission required equipment and all other supplies not categorized as Red or Yellow Disk TAT. Examples are vehicles, generators, tools, light sets, gas ranges, etc.

7. Uses of Cargo Categories.

During the preparation of unit movement plans all unit equipment and supplies will be divided into Red Disk TAT, Yellow Disk TAT, and Category Z equipment. DA Form 2940-R (Unit Loading Inventory and Checklist) (Worksheet), will be complied for each cargo category. This breakdown greatly assists in preparing vehicle loads for the motor march to the embarkation point. Additional prioritization within cargo categories may be required according to any given situation.



UNIT LOADING INVENTORY AND CHECKLIST (WORKSHEET)

ORGANIZATION		STATION				
TOE		DATE				
PACKAGE NO.	QUANTITY	DESCRIPTION	DIMENSIONS (L X W X H)	WEIGHT (LB)	CUBE (FEET)	SQUARE* (FEET)
TOTALS						

*INCLUDE AMOUNT OF LOAD EXTENDING BEYOND VEHICLE DIMENSIONS.

DA FORM 2940-R, 1 Dec 1975 Supercedes DA Form 2940-R, dated 1 Mar 65. 6209-80

Figure 1-1. DA Form 2940-R

8. Computerized Movement Planning and Status System (COMPASS).

COMPASS is an automated system that, if properly maintained and updated, will save the UMO many hours of tedious work. A new format is called the Automated Unit Equipment List (AUEL). The purpose of COMPASS is to assist commanders in fulfilling planning and execution responsibilities by providing:

a. Standard reporting procedures for all AC and RC units.

b. Viable planning and execution document.

c. Automated Unit Equipment List (AUEL). The AUEL that is provided by COMPASS saves the UMO many hours of researching TOEs, MTOEs, and TDAs to come up with an equipment list. With AUEL he just divides into cargo categories and fills out DA Form 2940-R.

d. Reduces manual preparation of documentation for move.

e. Blocking and bracing material requirements are given, thereby saving the UMO the task of calculating the BBM.

f. Provides an automated Unit Movement Data (UMD) master file. Most of the information needed to prepare load plans is included in the COMPASS report.

9. Contents of a Movement Plan.

a. Statement of the requirement and how to implement. For example, a POM move may be described as "an administrative category A deployment to be implemented by surface movement from station of origin to the port of embarkation. At the port of debarkation, movement will be by surface mode to final destination." The implementation statement will always include MTOE category (A, B, or C) TDA category, and mode of movement.

b. Identification of administrative, logistical, and coordination requirements. Examples of administrative requirements are wills, convoy clearances, pay, disposition of POVs, etc.. Examples of logistical requirements are property book transfer or transportation requests that exceed organic capabilities. An example of coordination is asking another unit to assist load teams.

c. Organization for movement and duties of personnel.

(1) Identify where each element is assigned for travel, who (by station, not by name) is in charge, and what each soldier is to do.

(2) Duties to be performed include loading, packaging, maintenance, rations, and area police.

d. Actual load plans for organic vehicles and blocking and bracing material (BBM) requirements.

e. Inventory of shipping containers with packing lists.

f. Requirements for commercial transportation equipment.

g. Actual load plans for organic vehicles and BBM.

h. COMPASS rail BBM listing.

10. Sequence for Developing Movement Plans.

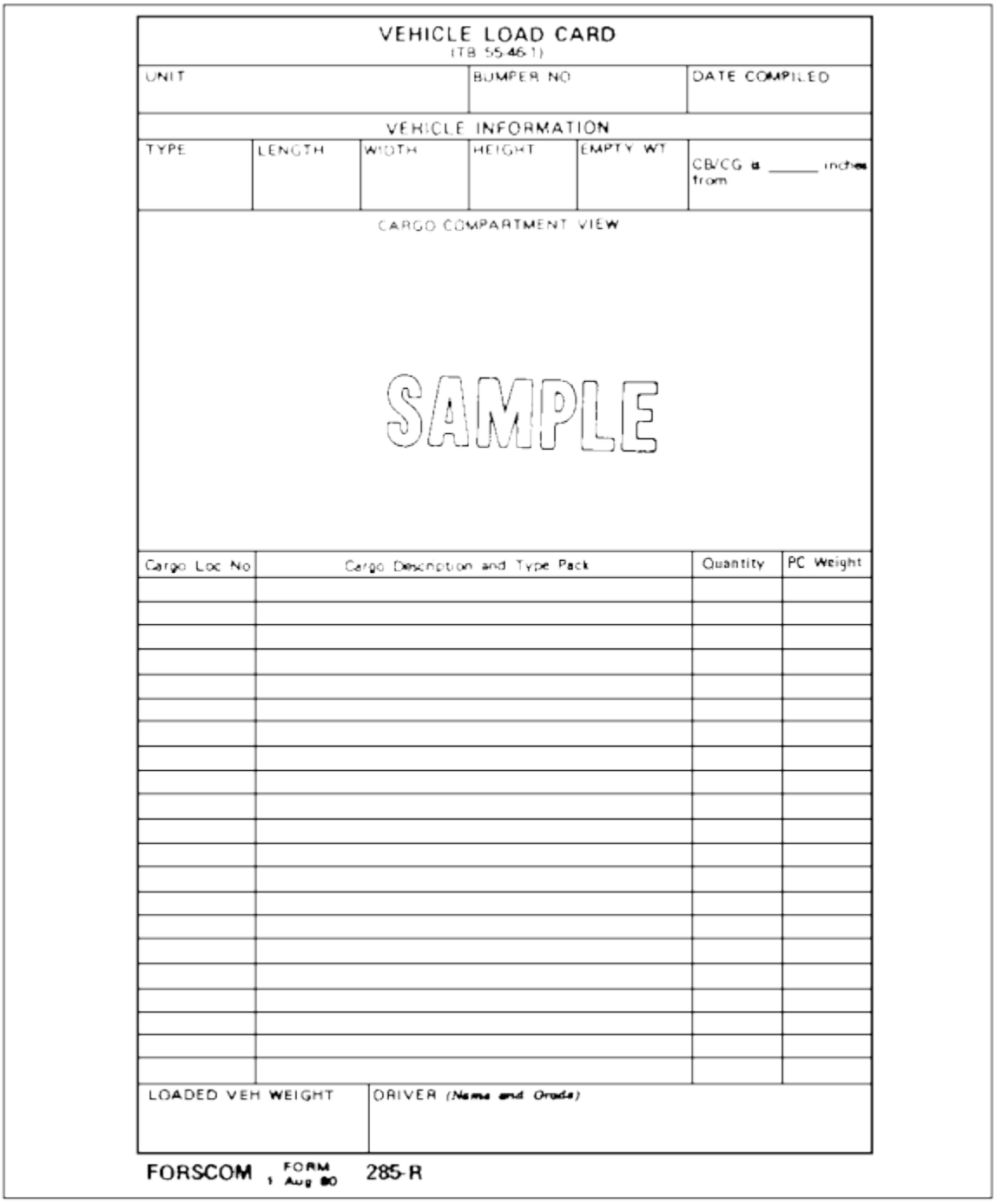
a. Determine the type plan and requirements.

b. Determine movement requirements for:

(1) Passengers: For all types of plans, consider all MTOE personnel. Special movement plans depend on personnel identified for the operation.

(2) Cargo: POM plans will address movement of all MTOE required vehicles and equipment, on hand or not, and mission essential CTA items. POMCUS plans include all vehicles and items of equipment which are MTOE required and not prepositioned. Any items identified as TAT on the prepositioned equipment listing will also be considered for special plans cargo requirements, which will depend on the guidance of the tasking directive.

(a) To determine the cargo requirements, the essential equipment data must be developed/determined. Prepare a Unit Equipment List that lists all vehicles/trailers, equipment, and supplies identified to accompany the unit on its move. Items will be listed in the reduced configuration. An updated COMPASS report will provide you with most of the information. If not using COMPASS, record the LIN of each item, the actual shipping package divisions, weight and cube of, IAW TB 55-46-1, the equipment being moved. If the equipment will be transported in organic cargo vehicles a FORSCOM Form 285-R (figure 1-2) must be filled out for each vehicle.



VEHICLE LOAD CARD
(TB 55-46-1)

UNIT			BUMPER NO		DATE COMPILED
VEHICLE INFORMATION					
TYPE	LENGTH	WIDTH	HEIGHT	EMPTY WT	CB/CG is _____ inches from

CARGO COMPARTMENT VIEW

SAMPLE

Cargo Loc No	Cargo Description and Type Pack	Quantity	PC Weight

LOADED VEH WEIGHT	DRIVER (Name and Grade)

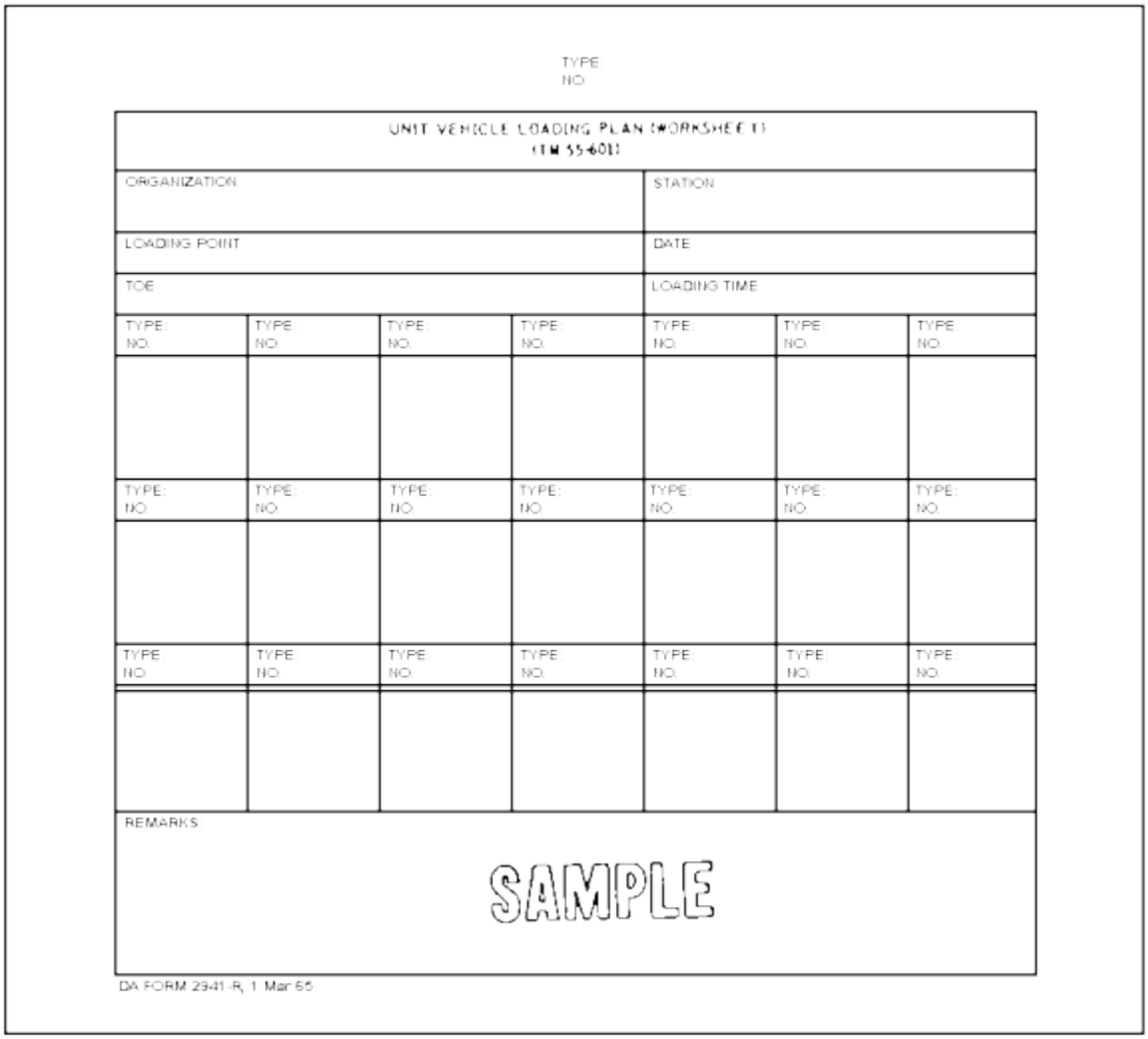
FORSCOM , FORM Aug 80 285-R

Figure 1-2. FORSCOM Form 285-R

(b) Designate all equipment and supplies into one of the three cargo categories: Red, Yellow, or Z. Pack these items separately.

(c) Prepare a DA Form 2940-R (Unit Loading Inventory and Checklist) (Worksheet). A separate DA Form 2940 is filled out for each cargo category, R, Y, or Z. This is the must important form.

(d) Prepare DA Form 2941-R Unit Vehicle Loading Plan (Worksheet). This depicts how all unit equipment, supplies, and personnel will be convoyed to the railhead, airhead, terminal, or new location. List vehicles by loading/packaging numbers you designated on DA Form 2940-R. Going from left to right match prime movers to trailers and enter them alternately (i.e., TRK, TRL, TRK, TRL, etc.). Load as many packages onto organic vehicles as possible ensuring rated capacity is not exceeded. Support vehicles must be programmed and requested to accommodate all equipment or supplies that cannot be handled by organic asserts. SPT will identify support vehicles and will be numbered consecutively.



TYPE
NO.

UNIT VEHICLE LOADING PLAN (WORKSHEET)
(TM 55-601)

ORGANIZATION				STATION		
LOADING POINT				DATE		
TOE				LOADING TIME		
TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.
TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.
TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.	TYPE NO.

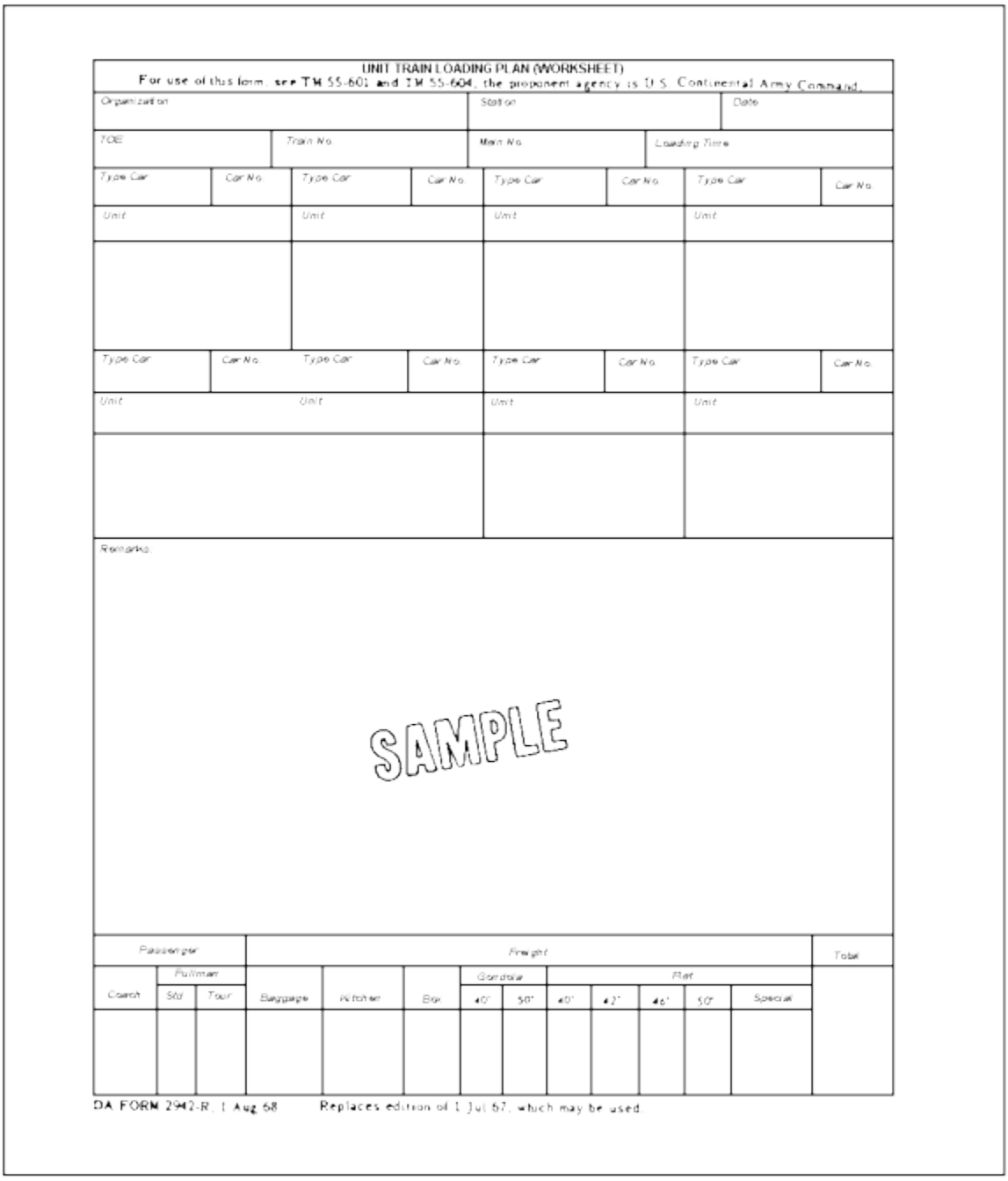
REMARKS

SAMPLE

DA FORM 2941-R, 1 Mar 65

Figure 1-3. DA Form 2941-R

(e) Prepare DA Form 2942-R (Unit Train Loading Plan) (Worksheet). This is used to determine the requirements for railcars and list the load for each car by package number and weight. Plan loads to achieve a minimum of 24,000 pounds per car. Chapter 3, TM 55-601 will give you the dimensions of the cars.



UNIT TRAIN LOADING PLAN (WORKSHEET)

For use of this form, see TM 55-601 and TM 55-604; the proponent agency is U.S. Continental Army Command.

Organization		Station		Date	
TOE	Train No.		Main No.	Loading Time	

Type Car	Car No.	Type Car	Car No.	Type Car	Car No.	Type Car	Car No.
Unit		Unit		Unit		Unit	
Type Car	Car No.	Type Car	Car No.	Type Car	Car No.	Type Car	Car No.
Unit		Unit		Unit		Unit	

Remarks:

SAMPLE

Passenger			Freight										Total
	Pullman					Gondola		Flat					
Coach	Std	Tour	Baggage	Kitchen	Box	40'	50'	40'	42'	46'	50'	Special	

DA FORM 2942-R, 1 Aug 68 Replaces edition of 1 Jul 67, which may be used.

Figure 1-4. DA Form 2942-R

c. Develop load plans for all organic cargo vehicles.

d. Determine administrative, logistical, and coordinating requirements.

e. Test vehicle load plans and prepare actual load plans.

f. Record and validate UMD and send forward to higher headquarters.

g. Prepare movement plan and send to higher headquarters.

PART B

DETERMINING RESOURCES AND REQUIREMENTS FOR DEPLOYMENT INTRODUCTION

The following is a list of minimum items that need to be determined/coordinated for a Battalion Deployment. The list is not all inclusive and local regulations may mandate additional coordination with the host installation.

1. Movement Requirements.

a. General Movement Requirements.

(1) Movement of military motor vehicles may be authorized by the command or agency issuing Movement Orders, if the movement is relatively short distance, connected with maneuvers, and considered desirable for training.

(2) Tracked vehicles and other equipment which cannot be operated at usual highway speeds normally will not be moved on public highways under their own power but by rail, transporter truck, or water transport.

(3) In all cases movement of vehicles (2) above over public highways under their own power, permits must be obtained from appropriate highway authorities (each state movement will move through IAW [AR 55-162]).

(4) Destination installation commander must be notified in advance, of actual departure and actual arrival times.

b. Movement/Clearance Requirements for a Convoy.

(1) DA Policy is "Commercial lift will be used to maximum in CONUS."

(2) Non-roadable vehicles will not be road marched more than 75 miles.

(3) DD Form 1265 (Request for Convoy Clearance) will be prepared and coordinated for each element of the move. DD Form 1266 (Request for Special Hauling Permit) will be prepared as necessary and accompany convoy clearance request. Both are submitted to installation Unit Movement Coordinator (UMC) (G4/S4, ITO or DOL).

(4) A convoy consists of 6 or more tactical vehicles or one or more vehicles requiring a special hauling permit.

(5) Convoys moving on public highways will move administratively, obeying all local and state laws and ordinances.

(6) Requests for convoy clearance and special hauling permits will be submitted to SI/STARC for coordination of en route support, modification, approval, and assignment of ID number normally coordinated by installation unit movement coordinator (UMC).

c. Movement/Clearance Requirements for Rail.

(1) Normally the installation transportation officer (ITO) will coordinate movement/clearance requirement for rail. This coordination is done with Military Traffic Management Command (MTMC).

(2) Unit must:

- Determine equipment to be moved by rail.
- Determine and develop load plans that identify rail car requirements and loads. Unit submits rail car requirements to ITO who requests rail cars. Unit must provide fund cite with requests. ITO can give cost estimate to unit.
- Unit must ID blocking and bracing requirements and request these items thru DOL UMC.

2. Movement Support.

a. Procedures for acquiring RON sites.

(1) Unit must send installation UMC a message requesting RON support. What support to be provided will be determined by the RON installation.

(2) Message must state total requirements. Key info required is:

- Number of personnel officer/EM (male/female).
- Billet/dinning requirements or BIVOUAC site.
- Status of personnel (TDY or deployment for training).
- Date/time of arrival of convoy, departure date/time.
- Make up of convoy (number and type vehicles).
- Fuel requirements by type: GAL's Aviation, Mogas, etc. Must have proper fund documentation for reimbursement - should be forwarded in advance. Installation will advise of proper documentation.
- Security requirements (special, if any).
- P.O.C.
- Communications, radio, etc.

b. Unit must determine what maintenance/recovery support is available for the convoy. This is determined by the installation in accordance with AR 5-9, Intraservice Support Installation Area Coordination. The availability of medical/hospitalization support for the convoy must be determined. AR 5-9 assigns areas of responsibility to each installation by counties/state for logistical, engineering, PMO, safety, EOD, TASC, PA, weather, and health.

3. Training Areas. The unit must determine what ranges/training areas are available to conduct familiarization/qualification firing for its individual and crew served weapons. They must also determine if facilities are available for any special requirements such as platoon live fire exercises,

demolition training, land navigation course, close air support etc.. In addition you should determine if any abnormal safety restrictions exist for the range facilities you require.

4. Training Enhancers. Training enhancers include such items as GSRs, tanks, A-10s, artillery, and targeting systems. You must determine if any of the assets are available, and if so what are the request and usage procedures.

5. Buildings/Cantonment Area. Buildings and cantonment area includes the following facilities:

- Buildings for battalion/unit headquarters and arms/storage areas.
- Buildings available for billeting and feeding soldiers.
- Areas to serve as track/wheeled vehicle park and motor pool.

6. Exercise (Supply & Services). In addition to determining the availability/shortages of all classes of supply you must also coordinate with the installation for such services as laundry/bath facilities, latrine services, disposal services, and guard support.

7. Maintenance/Transportion Services. The availability of maintenance support for the tracks, wheeled vehicles, commo, small arms, and missiles must be determined, to include GS/DS maintenance support. Transportation includes coordinating for commercial vehicles as will as TMP support.

8. Personnel/Admin/Legal/Medical. The following services must be determined/coordinated:

- Admin support.
- Legal services.
- Civilian KP support.
- Post exchange services.
- Availability and capability of hospital support.
- Range support requirements for medics.

9. Communications. In addition to communications to support range training you must also determine what type of commo services are available to contact home station.

- Physical Security. Local physical security requirements can be found in the host installations regulations.

PART C

PREPARING ROAD MOVEMENT GRAPHS, TABLES, OVERLAYS, AND STRIP MAPS

1. Road Movement Graph.

a. A road movement graph is a time-distance diagram used in planning, preparing, or checking road movement tables, and controlling marches. It shows the approximate location at a specified time of the head or tail of each serial, provided the road movement proceeds as scheduled. The vertical scale to the left, with point of origin at the bottom, serves as a distance scale in kilometers and should show the relative locations along the route of critical points where coordination of the movement is required.

b. A serial is represented graphically by drawing a line to represent the movement of the head of the serial and a line to represent the movement of the tail of the serial. The lines are parallel and are drawn with a slope that represents the rate of march (at 24 kilometers on the vertical to 1 hour on the horizontal scale).

c. To prepare a road movement graph, the following steps are applicable (figures 1-5 & 1-6).

(1) Designate the lower left corner of the graph sheet as the SP Time (1225 hrs), or earlier even hour before the march is to begin. Select a convenient scale (one vertical square=2 km, one horizontal square=10 min) and plot the hours available in sequence from left to right on the horizontal axis (1000 hrs through 2100 hrs).

(2) Determine the distance to be moved in kilometers (136km). Indicate the SP at the lower left corner of the graph sheet, and using an appropriate scale, plot the number of kilometers on the vertical scale from the SP (0km, Augusta) to the release point (RP) (136km, Fargo). Indicate the location of critical points (i.e., rest halts, check points, etc.) on the vertical scale.

(3) At the proper distance from the start point, draw a horizontal line indicating the location of the RP. Indicate the hour when the movement must be completed (2005 hrs) by a vertical line. Plot lines representing route restrictions, if any, at the proper distance and times on the graph.

(4) Determine the pass time (60 min) of foot and/or motor elements in the column. If not given, formulas for length-of-column (LGTHCOLMs and PSTs) foot and/or motor may be used.

(5) Starting at the SP at the specified hour (1225 hrs), plot the movement of the head of the leading element (left vertical line). If the motors (vehicles) move at a blackout rate of

24 km per hour, at 30 minutes they will have moved 12 kilometers; at 1 hour, 24 kilometers, etc.. Plot the trace of the lead vehicles to the RP.

(a) The last vehicle will cross the SP one "pass time" (60) after the first vehicle. Measure this time on the graph and plot the trace of the last vehicle of the element (right vertical line).

(b) The lines describing the head and tail of a serial are parallel (head of the column on the left and tail of the column of the right).

(c) Indicate the time subsequent serials (foot or motor) reach the SP, and plot the traces of the head and tail.

(d) Check to see that the plan complies with all restrictions and orders.

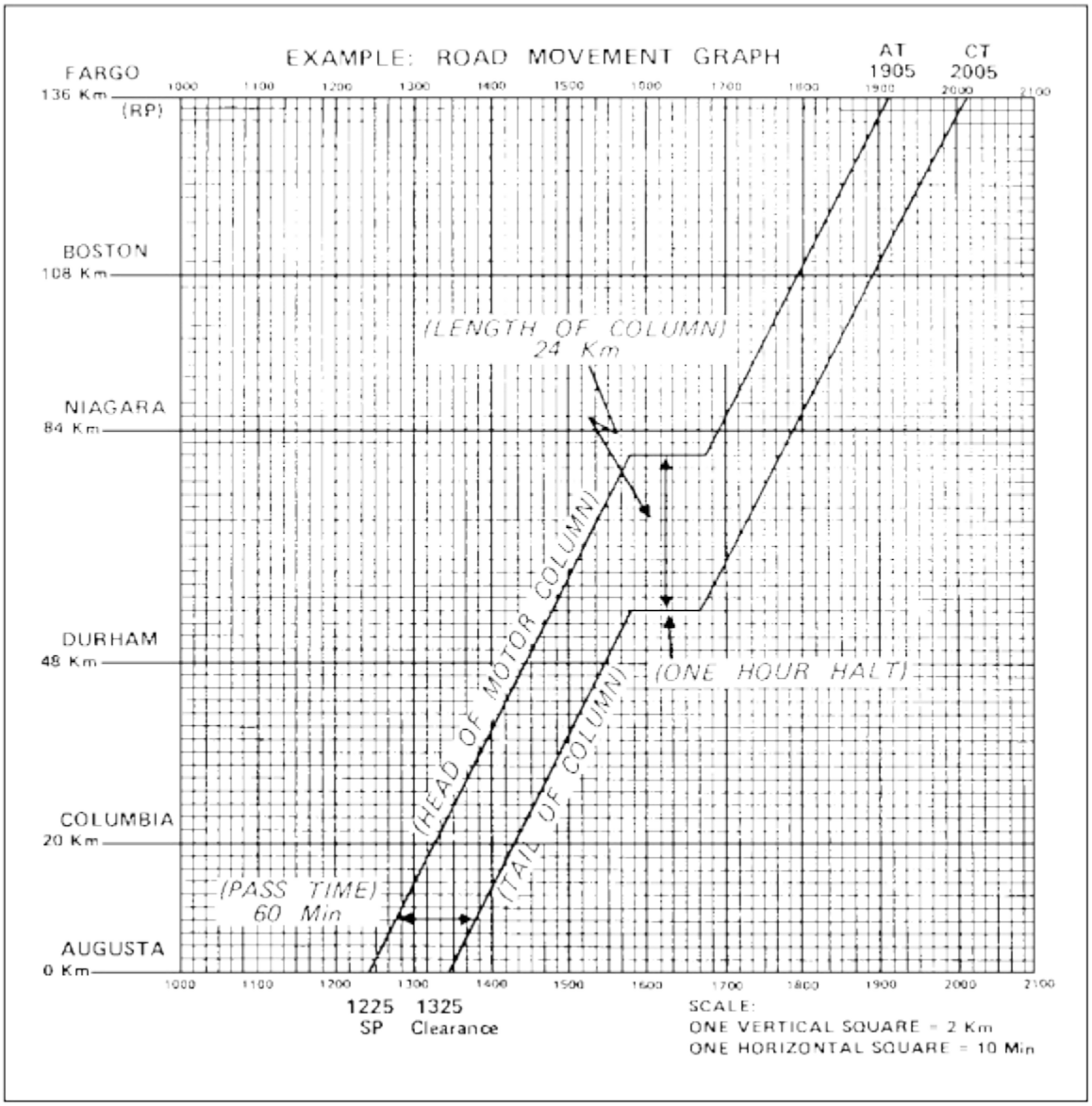


Figure 1-5. Road Movement Graph

PASS TIME (PST) OF FOOT COLUMNS

Multiply length of column (LGTHCOLM) by factor for rate of march.

PST (minutes) = (LGTHCOLM x Factor)

Select factor from table below

Rate (kmph)	Factor
4.0	.0150
3.2	.0187
2.4	.0250
1.6	.0375

LENGTH OF COLUMN (LGTHCOLM) OF FOOT TROOPS

Multiply number of men by factor for formation and add the total distance of the gaps between units.

LGTHCOLM (meters) = (No of men x Factor) + Column gaps

Select factor from table below

Formation	2m/Man	5m/Man
Single File	2.4	5.4
Column of Two's	1.2	2.7

PASS TIME (PST) OF MOTOR COLUMN

(Time required to pass given point)

Multiply the LGTHCOLM in kilometers by 60, divide by the speed of the column.[1]

$$\text{PST (min)} = \frac{\text{LGTHCOLM (km)} \times 60}{\text{Rate (kmph)}}$$

The following can determine an approximation of PST: [2][3]

PST (min) = No of veh x 0.08 (one march unit in close column)
= No of veh x 0.18 (two or more march units (a serial) in close column)
= No of veh x 0.20 (one march unit in open column)
= No of veh x 0.30 (two or more march units (a serial) in open column)

NOTES:
1. Extra time allowance must be added if not included in the unit SOP formations.
2. Open column figures are standard for a density of 12 vpk and a rate of 24 kmph; etc. column density is 48 vpk at 16 kmph.
3. March units consist of approximately 30 veh.

Figure 1-6. March Formulas

LENGTH OF COLUMN (LGTHCOLM) OF VEHICLES

(This is the sum of the lengths of the veh, the distance between veh, and the distance between march elements)

Divide the no of vehicles by the density of vehicle per km. Add this to the quotient of the time gaps multiplied by the rate (kmph) divided by 60.

$$\text{LGTHCOLM} = \frac{\text{No of veh}}{\text{Density (vpk)}} + \frac{\text{Time gaps (min)} \times \text{Rate (kmph)}}{60}$$

The following can determine an approximation of LGTHCOLM.[2]

LGTHCOLM (km) = No of veh x .02 (one march unit in close column)
= No of veh x .04 (two or more march units (a serial) in close column)
= No of veh x .08 (one march unit in open column)
= No of veh x .12 (two or more march units (a serial) in open column)

NOTES: 1. In close column, a 15-min time gap occupies 4 km LGTHCOLM; in open column, a 15 min time gap occupies 6 km LGTHCOLM.
2. Open column figures are standard for a density of 12 vpk and rate of 24 kmph; close column density 48 vpk at a rate of 16 kmph.

Figure 1-6. March Formulas (continued)

2. Road Movement Table (Annex to OPORD).

a. Road Movement Table. The road movement table is a method of providing movement schedules and other essential details pertaining to road movement to subordinate units. The road movement table provides:

(1) Proposed locations of elements at various times to the column commander.

(2) Arrival and clearance times at critical points along the route to the serial and march unit commanders.

b. Distribution. Road movement tables will frequently require a wider distribution than a normal operation order so that copies can be issued to movement control personnel, traffic posts, etc.

c. Security Classification. Security classification will be based on content of the road movement table and need not necessarily be the same as that of the operation order.

d. Preparation of Road Movement Table. Road movement tables consists of two parts.

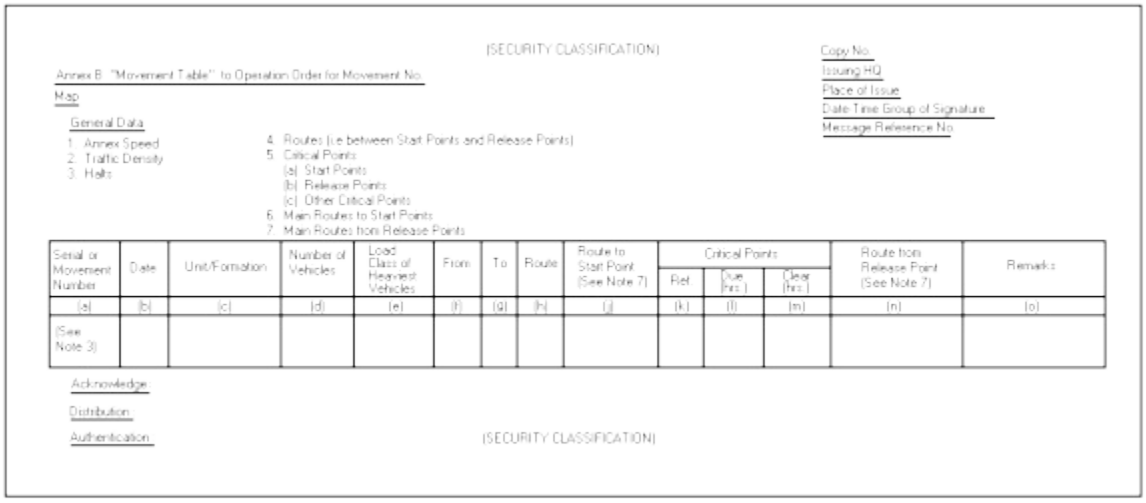
(1) The first part includes "data" paragraphs containing general information common to two or more columns (or elements of a column). Data is listed as follows:

- Average speed.
- Traffic density (The average number of vehicles that occupy 1 mile or 1 kilometer of road space).
- Halts.

- Routes (i.e., between start points and release points). The routes and points are described by grid references, code words, etc., and, if necessary, are numbered or lettered for ease of reference in the road movement table.
- Critical Points. A critical point is defined as a selected point along a route used for reference in giving instructions. It includes start points, release points, and other points along a route, such as bridges or intersections where interference with movement may occur or where timing is critical.
    - Start points
    - Release points
    - Other critical points
- Route classification (if applicable).
- Route restrictions (if applicable).
- Main routes to start points (if applicable).
- Main routes from release points (if applicable).

(2) The second part of the movement table is a listing of the columns (or elements of column), together with all other necessary information arranged in tabular form. The following information applies to the tabular form:

- Since the form may be issued to personnel concerned with control of traffic, the security aspect must be remembered. It may not be desirable to include dates or locations.
- If the tabular form is issued by itself and not as an annex to a more detailed order, the form must have the heading and be signed or authenticated in the normal way as for an annex issued separately.
- For simplicity, use only the minimum number of column headings. Information which is common to two or more march units should be included under the "data" paragraph. If the annex has the same distribution as the operation order, it will not be necessary to include the headings and endings as shown in figure 1-7.



(SECURITY CLASSIFICATION)

Copy No:
Issuing HQ
Place of Issue
Date Time Group of Signature
Message Reference No:

Annex B "Movement Table" to Operation Order for Movement No:

Map:

General Data

1. Annex Speed
2. Traffic Density
3. Halts
4. Routes (i.e between Start Points and Release Points)
5. Critical Points
   (a) Start Points
   (b) Release Points
   (c) Other Critical Points
6. Main Routes to Start Points
7. Main Routes from Release Points

Serial or Movement Number	Date	Unit/Formation	Number of Vehicles	Load Class of Heaviest Vehicles	From	To	Route	Route to Start Point (See Note 7)	Critical Points			Route from Release Point (See Note 7)	Remarks
									Ref	Due (hrs.)	Clear (hrs.)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)
(See Note 3)													

Acknowledge:

Distribution:

Authentication:

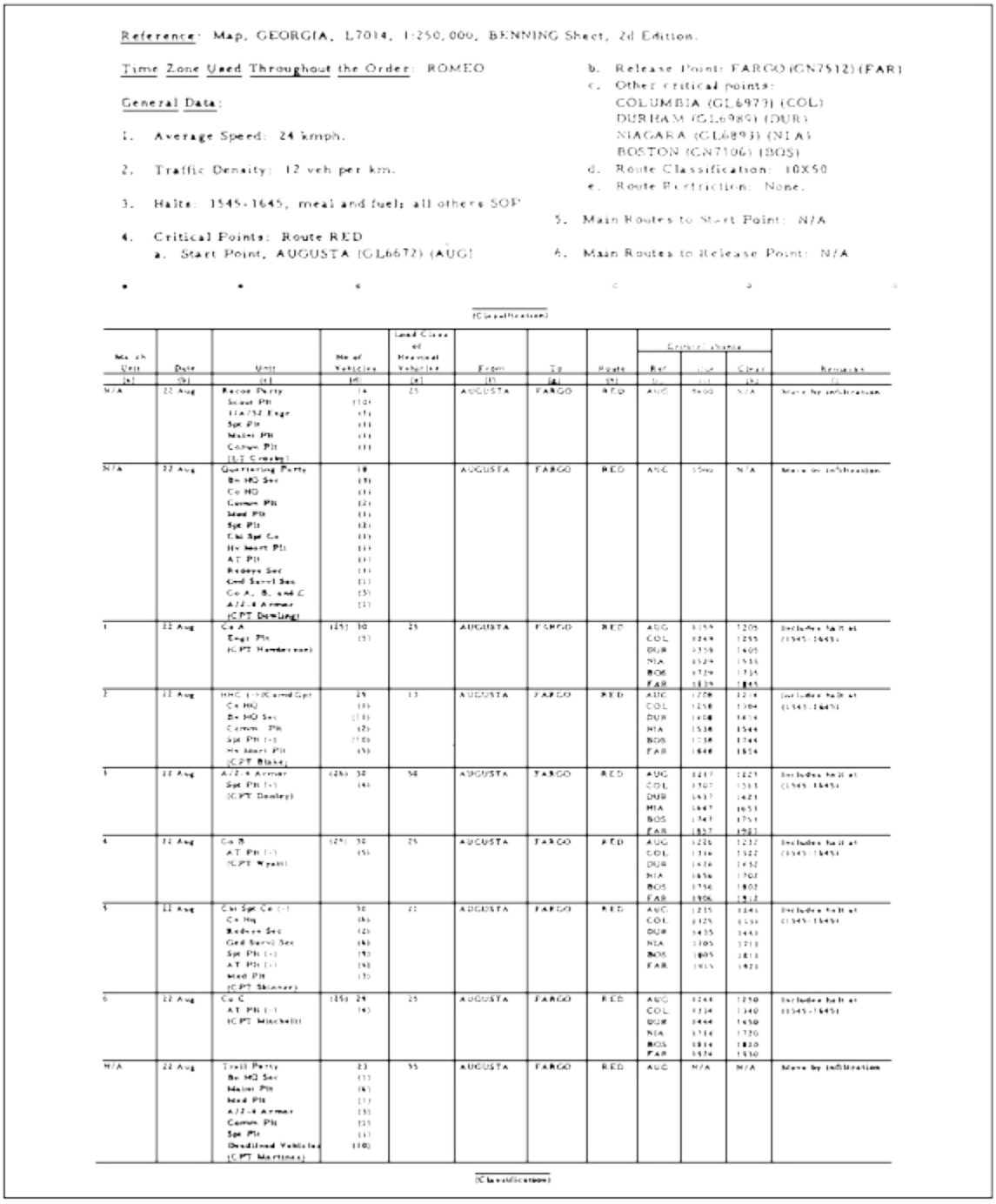
(SECURITY CLASSIFICATION)

Figure 1-7. Road Movement Table

e. Example Annex. Figure 1-8 is an example of a completed annex (road movement table) to a battalion OPORD. Note the following points:

(1) In paragraph 4 of the general data section, points are designated by names and grid references. Routes are labeled with code words.

(2) In blocks (f) and (g) of the tabular form section, point names are given, but no grid references. In block (h), the code word for the route which is given in the general data section is used.



Reference: Map, GEORGIA, L7014, 1:250,000, BENNING Sheet, 2d Edition.

Time Zone Used Throughout the Order: ROMEO

General Data:

1. Average Speed: 24 kmph.
2. Traffic Density: 12 veh per km.
3. Halts: 1545-1645, meal and fuel; all others SOP
4. Critical Points: Route RED
   a. Start Point, AUGUSTA (GL6672) (AUG)
   b. Release Point: FARGO (GN7512) (FAR)
   c. Other critical points:
      COLUMBIA (GL6973) (COL)
      DURHAM (GL6985) (DUR)
      NIAGARA (GL6893) (NIA)
      BOSTON (GN7106) (BOS)
   d. Route Classification: 10X50
   e. Route Restriction: None.
5. Main Routes to Start Point: N/A
6. Main Routes to Release Point: N/A

(Classification)

Marching Unit	Date	Unit	No of Vehicles	Load Class of Heaviest Vehicles	From	To	Route	Critical Points			Remarks
								Ref		Clear	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
N/A	22 Aug	Recon Party Scout Plt 1/4-3/4 Engr Spt Plt Maint Plt Comm Plt (LT Crosby)	14 (10) (1) (1) (1) (1)	25	AUGUSTA	FARGO	RED	AUG	0600	N/A	Move by infiltration
N/A	22 Aug	Quartering Party Bn HQ Sec Co HQ Comm Plt Med Plt Spt Plt Cml Spt Co Hv Mort Plt AT Plt Ridgeye Sec Grd Surv Sec Co A, B, and C A/2-4 Armor (CPT Dowling)	18 (3) (1) (2) (1) (2) (1) (1) (1) (1) (1) (5) (1)		AUGUSTA	FARGO	RED	AUG	0900	N/A	Move by infiltration
1	22 Aug	Co A Engr Plt (CPT Henderson)	(151) 30 (5)	25	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1159 1249 1359 1529 1729 1839	1205 1255 1405 1535 1735 1845	(Includes halt at 1345-1645)
2	22 Aug	HHC (-)(Cml Spt Co HQ Bn HQ Sec Comm Plt Spt Plt (-) Hv Mort Plt (CPT Blake)	29 (3) (13) (2) (10) (5)	13	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1209 1258 1408 1538 1738 1848	1214 1304 1414 1544 1744 1854	(Includes halt at 1345-1645)
3	22 Aug	A/2-4 Armor Spt Plt (-) (CPT Dooley)	(26) 30 (4)	50	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1217 1307 1417 1547 1747 1857	1223 1313 1423 1653 1753 1903	(Includes halt at 1345-1645)
4	22 Aug	Co B AT Plt (-) (CPT Wyatt)	(29) 30 (5)	25	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1226 1316 1426 1636 1756 1906	1232 1322 1432 1702 1802 1912	(Includes halt at 1345-1645)
5	22 Aug	Cml Spt Co (-) Co Hq Ridgeye Sec Grd Surv Sec Spt Plt (-) AT Plt (-) Med Plt (CPT Skinner)	30 (6) (2) (6) (9) (4) (3)	21	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1235 1325 1435 1705 1805 1915	1241 1331 1441 1711 1811 1921	(Includes halt at 1345-1645)
6	22 Aug	Co C AT Plt (-) (CPT Mitchell)	(35) 29 (4)	25	AUGUSTA	FARGO	RED	AUG COL DUR NIA BOS FAR	1248 1338 1448 1718 1818 1928	1250 1340 1450 1720 1820 1930	(Includes halt at 1345-1645)
N/A	22 Aug	Trail Party Bn HQ Sec Maint Plt Med Plt A/2-4 Armor Comm Plt Spt Plt Deadlined Vehicles (CPT Martinez)	23 (1) (6) (1) (5) (1) (1) (10)	55	AUGUSTA	FARGO	RED	AUG	N/A	N/A	Move by infiltration

(Classification)

Figure 1-8. (Annex) Road Movement Table

3. Route Overlay/Strip Map (Annex to Unit March Order).

a. Route Overlay. The route overlay is a diagram that shows the present location of units, the SP, the route of march, control points, distances, RP, and the location of units in the new area.

b. Plotting of Route.

(1) Plot the present location(s) of unit(s). Use grid references and standard topographic or military symbol.

(2) Plot the locations of the SP and RP; label by name.

(3) Trace the route of march from SP to RP. Label each route by name or number (figure-1-9). Plot the proposed location of unit(s).

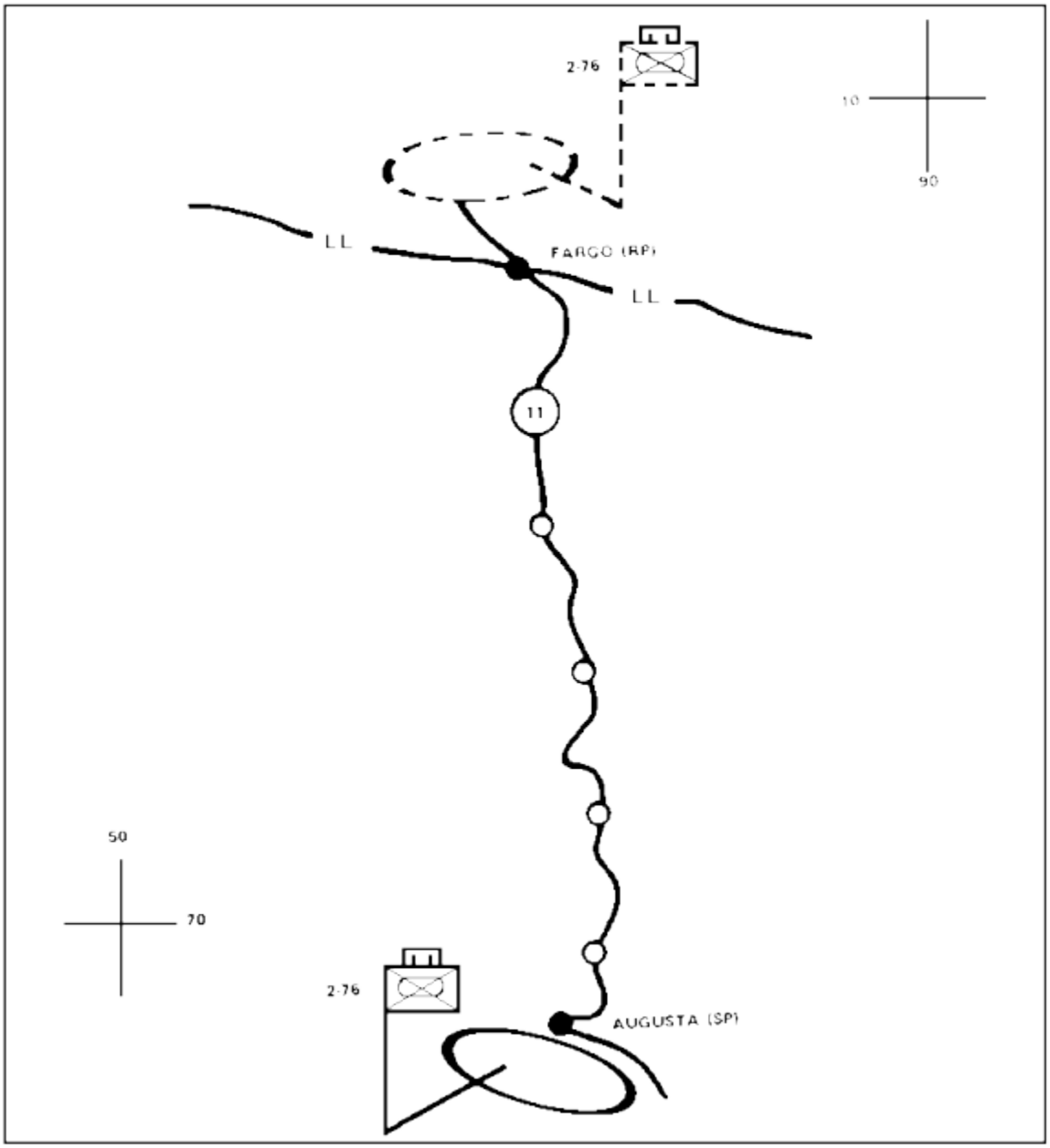


Figure 1-9. Route of March

(a) Plot designated critical points on the route of march between SP and RP: trace all roads that intercept the route at critical points, control points, phase lines, and/or halts. Label (with a code name or number) any major highways that cross the route of march. Label critical points by designated names (figure 1-9 Cont).

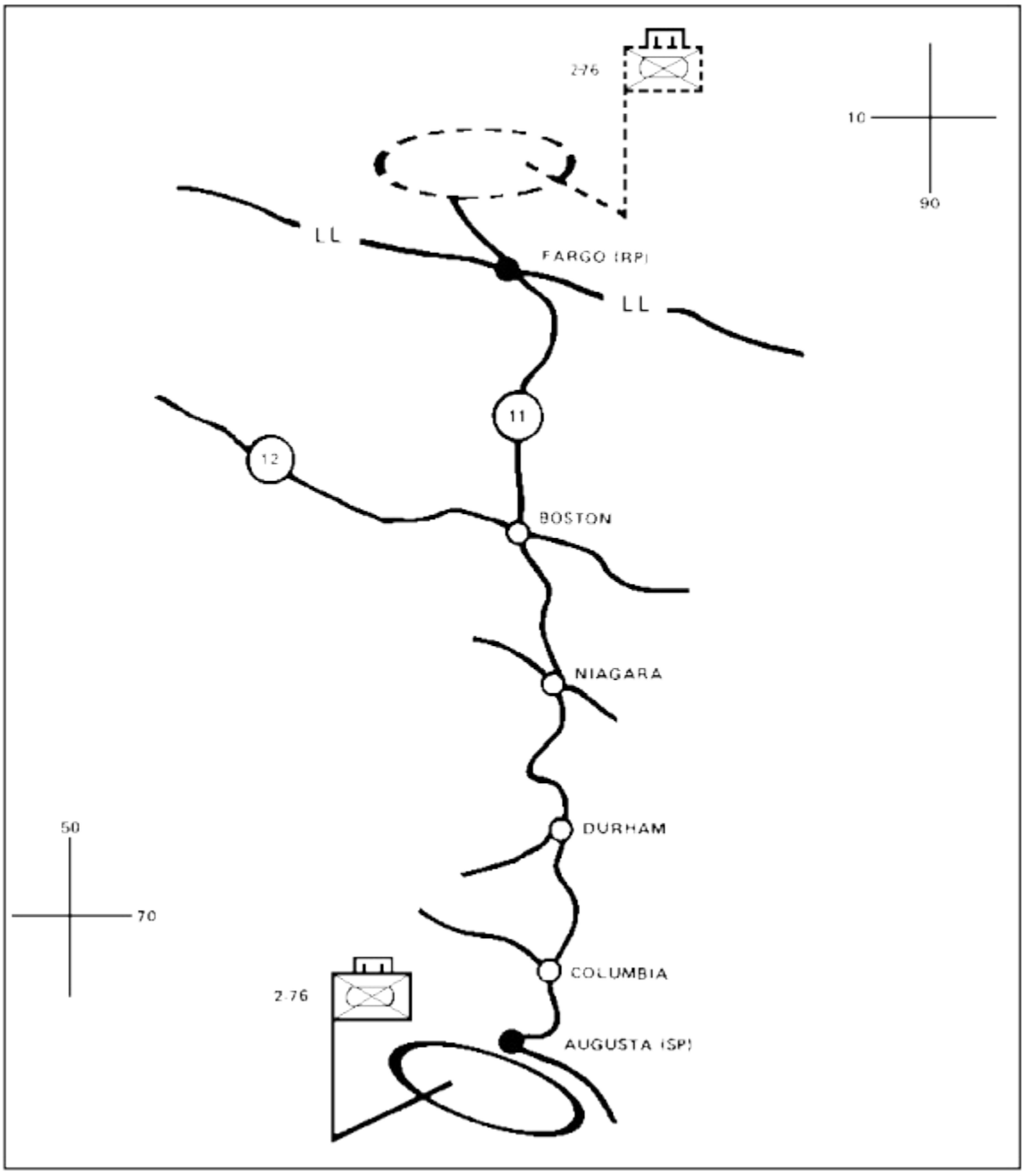


Figure 1-9. Route of March (Continued)

(b) Starting at the SP, measure and write in the distance in kilometers between each critical point up to the RP (figure 1-9, continued).

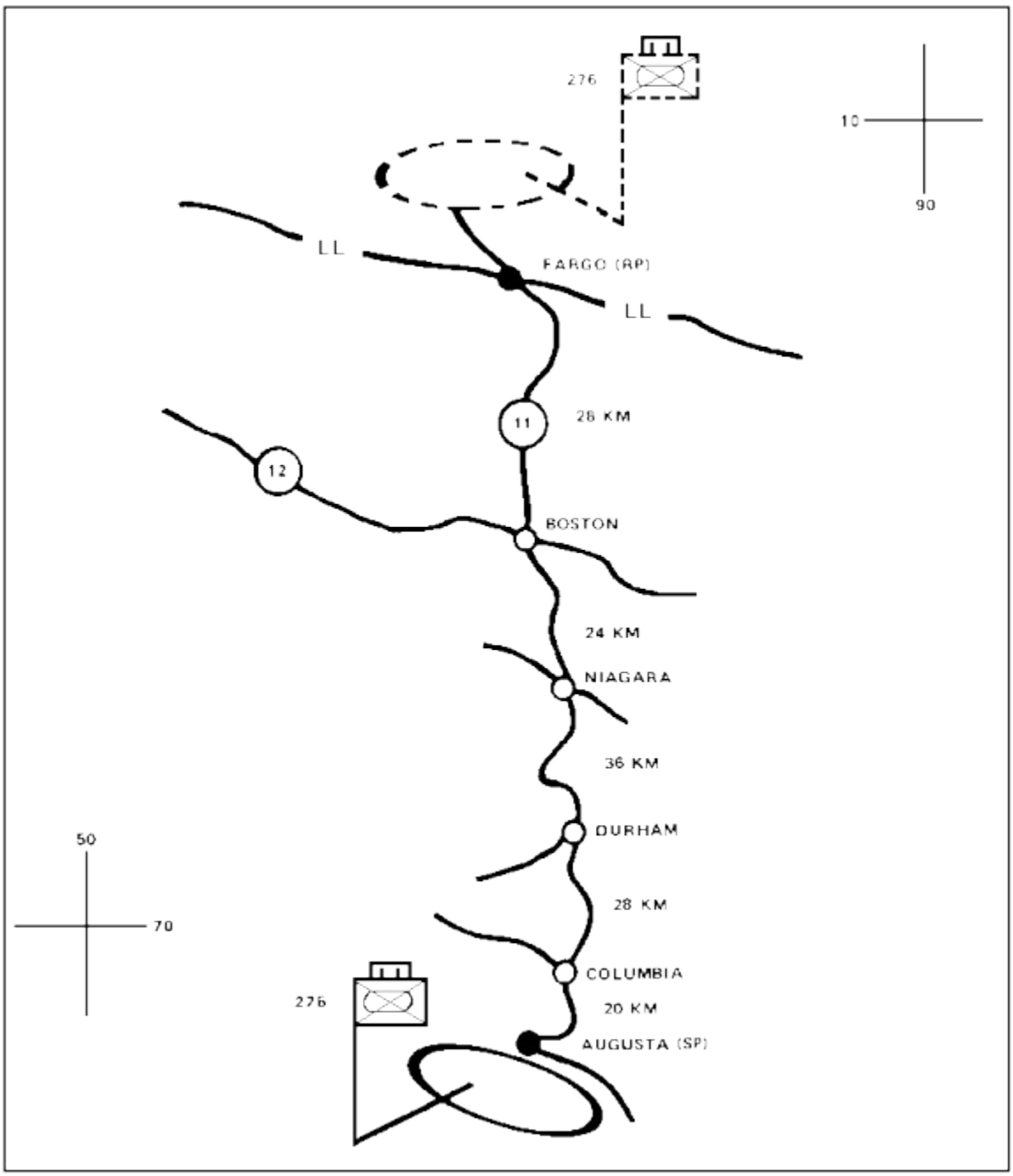


Figure 1-9. Route of March (Continued)

c. Overlay Heading. Figure 1-10 shows an example of a completed route overlay (annex to OPORD). The security classification of the route overlay will be based on content and needs not necessarily be the same as that of the road movement operation order. The route overlay will have security classification markings centered on the top and bottom of the overlay. For training purposes where no classification is valid, the word "classification" will be entered to reflect the requirement for security classification.

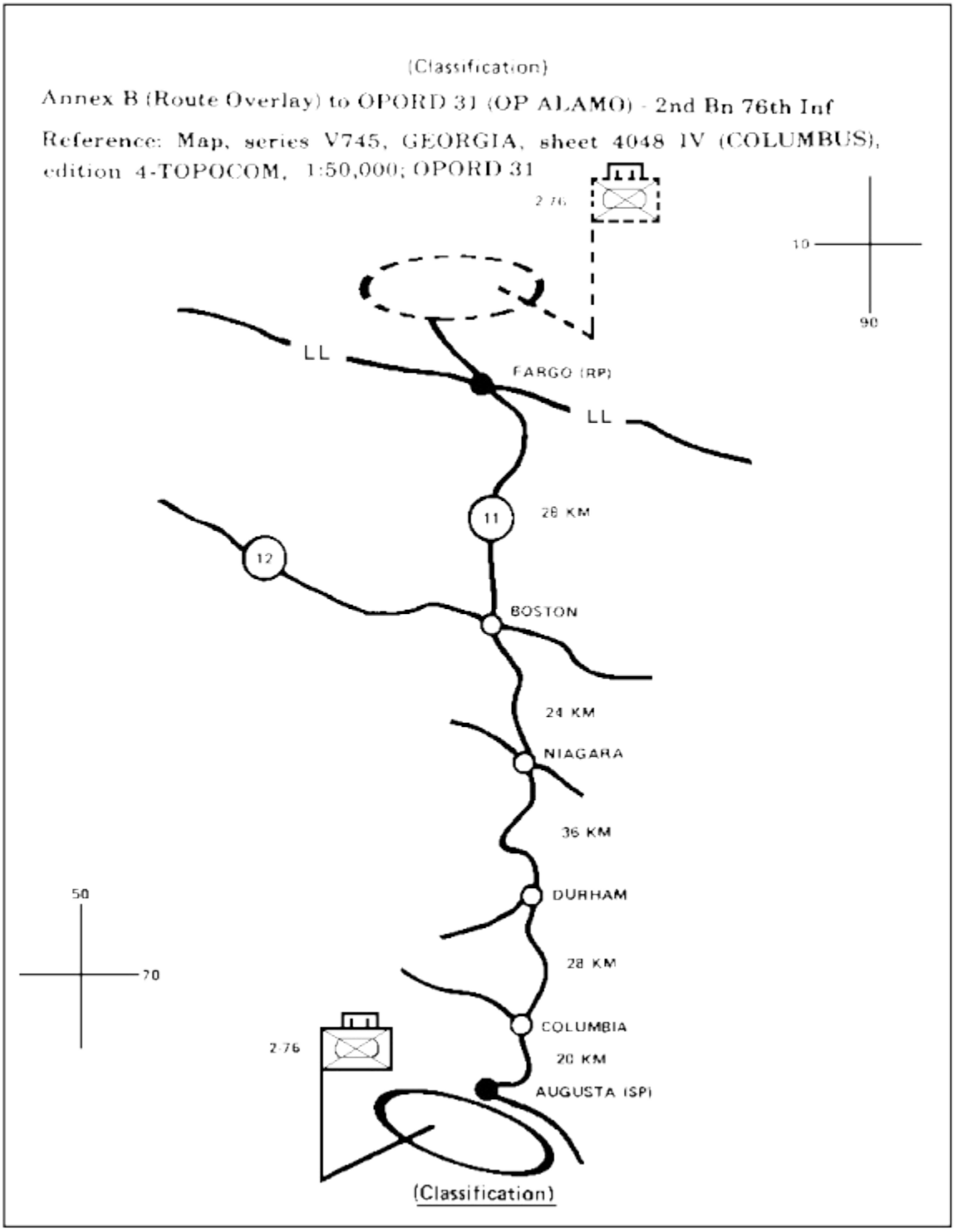


Figure 1-10. Annex (Route Overlay)

d. Strip Maps. Strip maps are similar to route overlays. The major difference is that the strip map is prepared by brigade or higher units as an annex to the unit march order. The strip map depicts various routes used by subordinate units, whereas the route depicts a single route. A secondary difference is that the strip map may be prepared either as an overlay or as a schematic of the map itself. While the amount of detail included on a strip map will vary with the commander's guidance, the terrain, and situation; a route strip map is normally more detailed

than the route overlay show. A strip map will include as a minimum the current locations of units, routes of march, critical points, landmarks, and route distances. Using units should reproduce strip maps in quantity and supply them to key personnel, particularly to vehicle commanders and route markers. (figure 1-11)

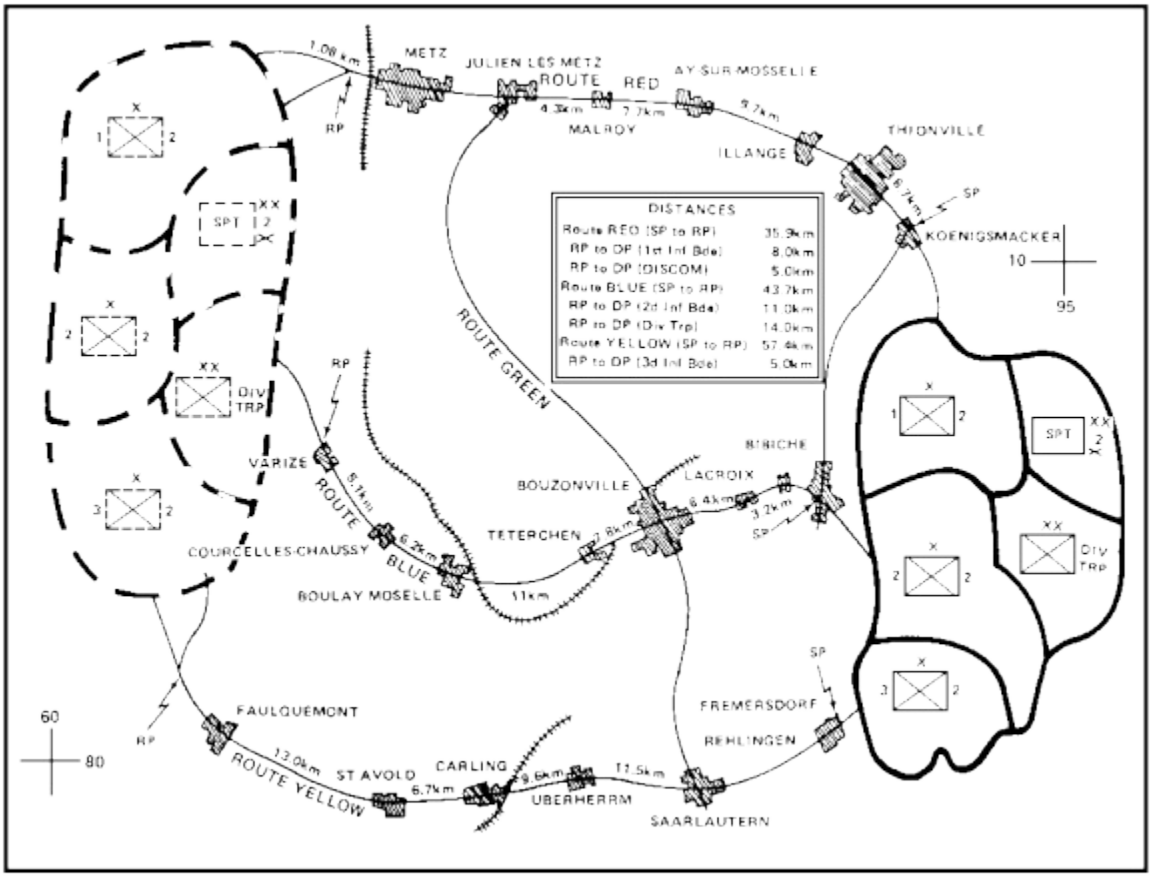


Figure 1-11. Strip Map

Lesson 1

Practice Exercise

Instructions The following items will test your understanding of the material covered in this lesson. There is only one correct answer for each item. When you have completed the exercise, check your answers with the answer key that follows. If you answer any item incorrectly, review that part of the lesson which contains the portion involved.

Situation: You are the S4 of an infantry battalion. You are presently preparing for a battalion deployment to another installation for an FTX. You have been directed by the battalion commander to determine the resources and requirements for the deployment and develop a tentative battalion movement plan.

1. The four types of movement plans are the _____, _____, _____, and the _____ plan.

2. A basic document published by the Department of the Air Force, or jointly, which authorizes a command to conduct a movement is called a (only three selections given)

   - ○ A. Warning Order.
   - ○ B. Movement Order.
   - ○ C. Movement Directive.

3. The category of overseas movement which allows the unit to move with less than the minimum essential equipment is called a _____ move. (only three selections given)

   - ○ A. Category A.
   - ○ B. Category B.
   - ○ C. Category C.

4. List the three types of cargo categories.

   A. _____.
   B. _____.
   C. _____.

5. Complete the following statement: An automated system that will save the UMO time in planning and executing a move is called _____.

6. A convoy consists of __ or more tactical vehicles or __ or more vehicles requiring special hauling permits.

   - A. 6 & 1
   - B. 1 & 1
   - C. 4 & 1
   - D. 1 & 6

7. A _____ is a time-distance diagram used in planning, preparing, or checking road movement tables and controlling marches.

   - A. strip map
   - B. road movement graph
   - C. overlay
   - D. road movement annex

8. The security classification of a road movement table will be based on the content of the

   - A. OPORD.
   - B. warning order.
   - C. road movement table.
   - D. movement annex.

9. The major difference between strip maps and route overlays is that they are

   - A. prepared by unit conducting the movement.
   - B. prepared by brigade or higher units.
   - C. an annex to the road movement graph.
   - D. less detailed than route overlays.

Practice Exercise
Answer Key and Feedback

Situation: You are the S4 of an infantry battalion. You are presently preparing for a battalion deployment to another installation for an FTX. You have been directed by the battalion commander to determine the resources and requirements for the deployment and develop a tentative battalion movement plan.

1. The four types of movement plans are the POM, POMCUS, Reserve Component, and the Tailored plan.

2. A basic document published by the Department of the Air Force, or jointly, which authorizes a command to conduct a movement is called a (only three selections given)

   A. Warning Order.

   B. Movement Order.

   C. Movement Directive.

3. The category of overseas movement which allows the unit to move with less than the minimum essential equipment is called a _____ move. (only three selections given)

   A. Category A.

   B. Category B.

   C. Category C.

4. List the three types of cargo categories.

   A. Red Disk TAT.

   B. Yellow Disk TAT.

   C. Category Z.

5. Complete the following statement: An automated system that will save the UMO time in planning and executing a move is called COMPASS.

6. A convoy consists of __ or more tactical vehicles or __ or more vehicles requiring special hauling permits.

    A. 6 & 1

    B. 1 & 1

    C. 4 & 1

    D. 1 & 6

7. A _____ is a time-distance diagram used in planning, preparing, or checking road movement tables and controlling marches.

    A. strip map

    B. road movement graph

    C. overlay

    D. road movement annex

8. The security classification of a road movement table will be based on the content of the

    A. OPORD.

    B. warning order.

    C. road movement table.

    D. movement annex.

9. The major difference between strip maps and route overlays is that they are

    A. prepared by unit conducting the movement.

    B. prepared by brigade or higher units.

    C. an annex to the road movement graph.

    D. less detailed than route overlays.

LESSON 2

PLANNING A BATTALION DEPLOYMENT/FTX

OVERVIEW

TASK DESCRIPTION:

This lesson requires you to learn, and understand how to develop a battalion field training exercise (FTX) and a platoon live fire situational training exercise (STX).

LEARNING OBJECTIVE:

ACTION:	Develop a battalion field training exercise and a platoon live fire situational training exercise.
CONDITION:	Given the information in Lesson 2.
STANDARDS:	You must correctly answer 70 percent or more of the questions concerning the lesson materials, contained in the subcourse examination.
REFERENCES:	The material contained in this lesson was derived from the following publications: ARTEP 7-8 MTP, FM 101-5, FM 101-10-1, FM 25-100, FM 25-101 and FM 25-4.

INTRODUCTION

"Every individual, leader, and unit training program must be carefully planned, aggressively executed, and thoroughly assessed."

Carl E. Vuono
General, United States Army
Chief of Staff

Lesson 1 dealt with developing a tentative movement plan and determining resources and requirements for a battalion deployment. This lesson will discuss how to develop both a battalion field training exercise and a platoon live fire situational training exercise.

PART A

FIELD TRAINING EXERCISE (FTX)

1. Description. FTXs are high-cost, high-overhead exercises conducted under simulated combat conditions in the field. They exercise command and control of all echelons in battle functions-intelligence, combat support, combat service support, maneuver, communications against an actual or

simulated OPFOR. They are conducted in a realistic environment using the full combined arms teams. They provide both intersystems and intrasystems training to fight AirLand battles, using all unit personnel and equipment. FTXs must include all attached units.

FTXs provide the most realistic environment of all training exercises. FTXs allow participants to appreciate real time and distance factors. FTXs involve several tactical situations in which one or more units participate. They may require movement and communications over long distances. FTXs do not use live fire. However, they may use a training enhancement systems (TES) such as MILES to assess losses realistically. TC 25-6 provides details regarding MILES employment.

FTXs are used to train the commander, staff, and subordinate units---

- To move and/or maneuver units realistically.
- To employ organic weapon systems effectively.
- To build teamwork and cohesion.
- To plan and coordinate supporting fires.
- To plan and coordinate logistical activities to support tactical operations.

FTXs are the only exercises that fully integrate the total force in a realistic combat environment. They involve combat, combat support, and combat service support units to include battle staff, survivability and combined arms training. FTXs encompass battle drills, crew drills, situational training exercises, and other types of training to reinforce individual and collective task integration.

2. Characteristics. FTXs are executed under battlefield conditions. They provide opportunities to practice both offensive and defensive operations. Thus, they enhance the ability of the soldiers and leaders to fight and survive on an integrated battlefield. Such training builds teamwork under conditions likely to prevail in time of war and impresses players, commanders, and staffs with the magnitude and scope of planning and operations.

FTXs portray administrative and logistical situations realistically so that player commanders and staff experience their impact on all aspects of the battle. FTXs should also integrate EW and NBC warfare into exercise play. Doing so familiarizes commanders and staff with the capabilities, availability, and employment doctrine of EW and NBC assets. When properly employed, electronic warfare assets become a combat multiplier that extends a unit's tactical capability. They provide commanders with nonlethal means, which can accomplish desired results and conserve combat capability. Prisoner of war play should be realistic. Trained personnel should act as EPWs so that interrogators and capturing units get realistic training.

FTX controllers, umpires, or evaluators must consider how players will be affected by the information they input. These inputs should make the players aware of the tactical and logistical situations. The input presents situations and requirements that will cause players to act.

Controllers must not influence play artificially. The control group must render prompt and logical rulings in all tactical and logistical situations that arise. When the players and OPFOR controllers make contact, the control group allows the situation to develop until a tactical ruling is indicated or required.

The control group assesses casualties and damage. It announces rulings in a manner that provides as much realism as possible. These rulings are based on observation of the player units, as well as on results from war-gaming, player-directed actions. Controllers have free access to player facilities so they can perform their assigned duties. However, they do not interfere with the players.

3. Personnel. Player unit personnel perform their assigned functions and duties. Controllers guide the exercise through OPFOR actions. To do so they create tactical situations which achieve exercise objectives and cause the play to flow to a logical conclusion. Evaluators observe player and OPFOR unit activities and determine whether tasks are performed to predetermined standards. Umpires determine the results of battle engagements, fires and obstacles, and support activities. They report the results to players, evaluators, and controllers. OPFORs replicate enemy forces in the appropriate size and strength to portray the threat activities realistically at specific times and places on the battlefield. The number of controller, umpire, evaluator, and OPFOR personnel that will be required depends upon the size of the player organization and the objectives of the exercise.

4. Equipment and Facilities. The equipment required for an FTX consists of--

- Communications equipment that will portray the higher headquarters of the player unit.
- General purpose items such as office supplies, overlay production materials, message and journal logs, report forms, unit SOPs, and appropriate reference materials.
- Equipment that player units at all echelons need to operate in the field for a sustained period.
- Appropriate military reference materials.

The exercise area should be large enough to allow realistic dispersion of all player units according to AirLand Battle doctrine. TC 25-1 (Training Land) contains guidance in determining space requirements. The site for the control headquarters should ensure good communications. The control headquarters should be located where it will support the exercise and allow for easy travel to and from player headquarters. Facilities in support of the control headquarters include--

- Security.
- Visitor reception and briefing.
- Food service.
- Medical service.
- Maintenance.
- Hygiene facilities.

The amount of outside support required will also depend on the scope and duration of the exercise. Assistance from outside agencies may be required in the following areas:

- Additional communications capability.
- Additional map coverage.
- Maneuver area clearances.

- Billeting.
- Medical service.
- Food service.

5. Phases.

a. Pre-exercise: Prior to selecting the FTX training mode, commanders must determine that subordinate commanders, leaders, and soldiers are proficient in the individual, leader, and collective skills required by their duty positions. Commanders will also ensure that all squads, platoons, and companies have attained basic proficiency in appropriate ARTEP tasks and missions. This must be done to obtain the appropriate training benefit from maneuvering tactical units while conducting a battalion-or brigade-level FTX.

Normally within 72 hours before STARTEX, the planners of the exercise train the controllers and umpires. Controller, evaluator, OPFOR, and umpire training for an FTX involves some or all of the following:

- Purpose and scope.
- Training objectives.
- Maneuver area rights and restrictions.
- Participating units.
- Enemy situation.
- OPFOR organization.
- Rules of engagement.
- Communications plan.
- Controller duties.
- Casualty and damage assessment.
- Controller records and reports.
- Intelligence play.
- Information flow.
- Controller communications checks.
- Controller reconnaissance of exercise area.
- After-action review.

The chief controller first trains his staff in supporting umpires/controllers. Then the controllers brief the player unit commanders and selected personnel on the exercise.

b. Execution: The LOI should include instructions for moving to the exercise site. Time should be set aside and personnel assigned prior to STARTEX to install the necessary controller communications equipment, to set up the controller TOC, and to prepare maps and overlays.

The controller manning tables for a division FTX found in Appendix D, FM 25-4 (How to Conduct Training Exercises) can be used as guidelines for manning the exercise control center (ECC). Manning tables should be modified to fit the echelon at which the FTX is being conducted. For example, battalion ECCs need fewer personnel than division ECCs, and their functions are narrower.

Immediately prior to STARTEX, the chief controller and controller staff give the player commander and staff a commander's update briefing. This briefing includes any changes to the LOI not already announced or items that require reiteration. Then the chief controller assumes the role of the players' higher commander. He is briefed by the controllers, who represent the staff. This briefing sets the stage for the exercise and imparts realism. At this time, the chief controller, as the higher commander, converts the exercise OPLAN to an OPORD. He then announces that the command staff is available for coordination with their player counterparts. This normally constitutes STARTEX.

The battalion FTX functions as follows:

- Player units with their respective evaluators and umpires, controller elements, and OPFOR personnel with their controllers and umpires move to initial field positions for STARTEX. They receive an orientation on administrative requirements and exercise objective. The general and initial situations are issued to players.
- OPFOR personnel are briefed separately and in a different location. They execute their role in the FTX, using predesignated incidents from the schedule of events to trigger player actions.
- Players fight the battle according to the initial OPORD. OPFOR actions are used to build intelligence estimates, which require players' staffs to make estimates and commanders to issue guidance and make decisions. FRAGOs are issued as needed in order to continue the battle.
- Players provide reports to higher headquarters, request support, and allocate or apply combat power, as appropriate.
- Umpires determine the results of maneuver engagements and the effects of the fire support. They assess losses accordingly.
- Controllers guide battle play in order to accomplish the exercise objectives and to keep the exercise within the limits prescribed by the scenario.
- Evaluators judge units and soldiers according to established standards in ARTEPs and soldiers manuals.
- This process continues until the FTX ends. The player commander in coordination with the chief controller should monitor the attainment of the exercise objectives. If

necessary, the exercise may be halted to reorient either the OPFOR or the player units in order to accomplish the exercise objectives.

All unit leaders and controller must stress safety. They ensure that all participants follow the established procedures for preventing injuries and keeping incidents caused by carelessness or overly aggressive personnel from interrupting the exercise. These include:

- Stand-off distances between troops and vehicles to prevent physical contact.
- Safety procedures for firing blanks and using pyrotechnics.
- Search procedures for captured personnel.
- Procedures for returning captured personnel to their own units as quickly as possible so the soldiers can continue FTX training.
- Safety procedures to halt all exercise activity.
- Safety requirements for vehicle movement at night or in limited visibility.

FTXs must be thoroughly planned and executed, or extensive maneuver damage can result. Great care must be taken to prevent water pollution or damage to roads, fields, crops, trees, animals, or man-made structures.

c. Postexercise: At ENDEX, the chief controller holds an immediate After Action Review (AAR) for all players and controllers in order to obtain the maximum training benefit from the exercise. This AAR will--

- Provide an opportunity for the players and controllers to exchange information, ideas, and lessons learned.
- Allow the OPFOR controllers to explain their battle plans, the battle results, and their strength at ENDEX. They should also present an assessment of future OPFOR capabilities.

PART B

SITUATIONAL TRAINING EXERCISES

1. General. Situational training exercises are used to practice, evaluate, and sustain collective tasks and mission proficiency. They permit multiechelon training, and they integrate individual tasks, leader tasks, drills, and subordinate unit collective missions in support of unit missions.

2. Situational Training Exercises. STXs are short, scenario-driven, mission-oriented, tactical exercises that train a single collective task (T&EO) or a group of related battle drills and collective tasks.

STXs provide the leader a method to train, using doctrinally approved tactics and techniques, but unlike a battle drill, it does not establish the method of execution as doctrine. STXs may be performed without ammunition, with blank ammunition or live fire, or without MILES, and under all environmental conditions. Although mission-oriented an STX does not train all tasks required for a mission.

An STX is a series of collective tasks arranged in a logical sequence to train a portion of a mission. STXs also require leader tasks, such as planning, controlling, and reporting, to conduct the supporting battle drills/collective tasks. While each STX focuses on a specific mission, it does not stand alone (under all conditions) as the only STX required for total mission proficiency. Therefore, to accomplish mission proficiency, several STXs with the same mission must be trained. This is a continuous process that must be repeated for each mission.

a. STX Development. At platoon level, STXs are conducted extensively. The trainer selects from the example STXs shown in chapter 2, mission outline, (ARTEP 7-8 MTP) or develops his own (using the matrixes in chapter 2 or the operation outlines in chapter 3) based on the factors of METT-T, training needs, and commander's guidelines.

Each STX plan should consist of the following: (Figure 2-1)

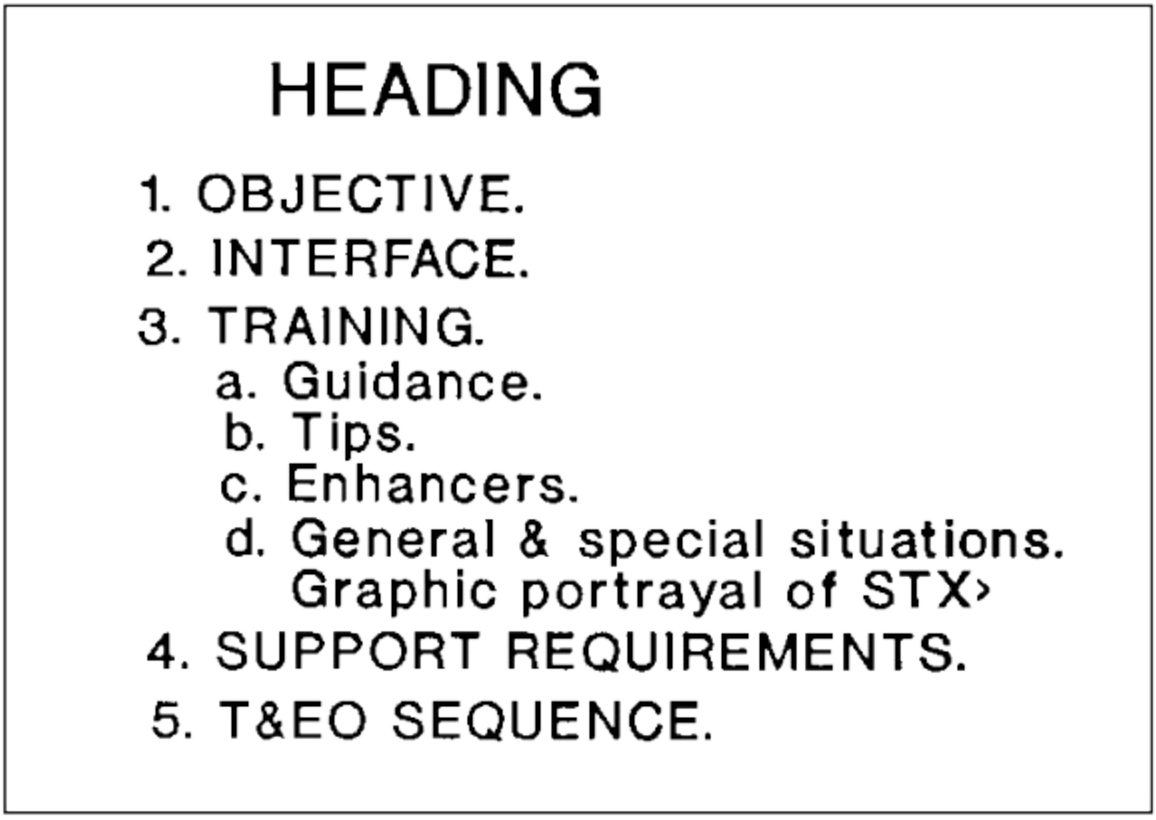


Figure 2-1. STX Planning Format

(1) Heading. The heading includes the unit for which the STX was prepared, title of the STX, and the training matrix identification of the STX.

(2) Objective. The objective identifies who the STX is designed to train and what operation it supports.

(3) Interface. The interface paragraph provides a list of those battle drills (squad, section, and platoon for this MTP) and company or habitually attached and supporting units, if available, that may be trained along with the STX.

(4) Training. The training section includes paragraphs on the following:

- Guidance on related subordinate unit leader, individual, and collective training that the leader may wish to consider training before the performance of the STX.
- Tips that aid the leader in preparing and conducting the STX.
- Training enhancers that provide guidance on the process of integrating NBC operations, OPFOR, limited visibility operations, and so forth, in the STX.
- General and special situations, or scenarios, and FRAGOs.

(5) Support requirements. This section provides a listing of those items required to conduct the exercise. Examples of specific requirements are number and types of equipment, number of evaluators, number and types of OPFOR, type and size of training area, ammunition, fuel, training aids/devices, and rations.

(6) T&EO sequence. The T&EO sequence lists the T&EO task title and page number from chapter 5 in chronological sequence in which they are executed in the course of the STX.

b. STX Training. STX training should be tailored to train high-payoff tasks identified in the training plan. High-payoff tasks are those individual and leader tasks, battle drills, and other collective tasks that support several operations and will significantly improve mission proficiency. An STX may involve only key participants in a TEWT or may involve the entire unit with all equipment.

Before beginning STX training, make sure that the unit can perform all the subtasks for the T&EOs. Some of these subtasks are individual and/or leader tasks. If in doubt about the unit's ability to perform the subtasks, conduct individual and battle drill training to bring the unit up to standard. Integrated training should be used whenever possible to make the best use of available time.

c. After Action Review. At the end of the evaluation, feedback should be provided to the platoon and squads to increase and reinforce learning. An AAR is not a critique (a recounting of the tasks the unit did well or did poorly). In an AAR, the leaders and soldiers of the evaluated unit are active participants in the process.

Because all members participate, each member becomes a source of feedback information. This provides a richer "data base" from which key points can be drawn. For example, a leader's assessment of the situation and the basis for his decision are known only to him. The AAR leader tries to get this information so that it becomes an important part of the discussion and forms the context for discussing alternative courses of action.

Figure 2-2 is an example format that evaluators may use as a working paper for making detailed observations during an exercise. By collecting and recording the data from these working papers, the evaluator obtains the information needed to conduct the AAR.

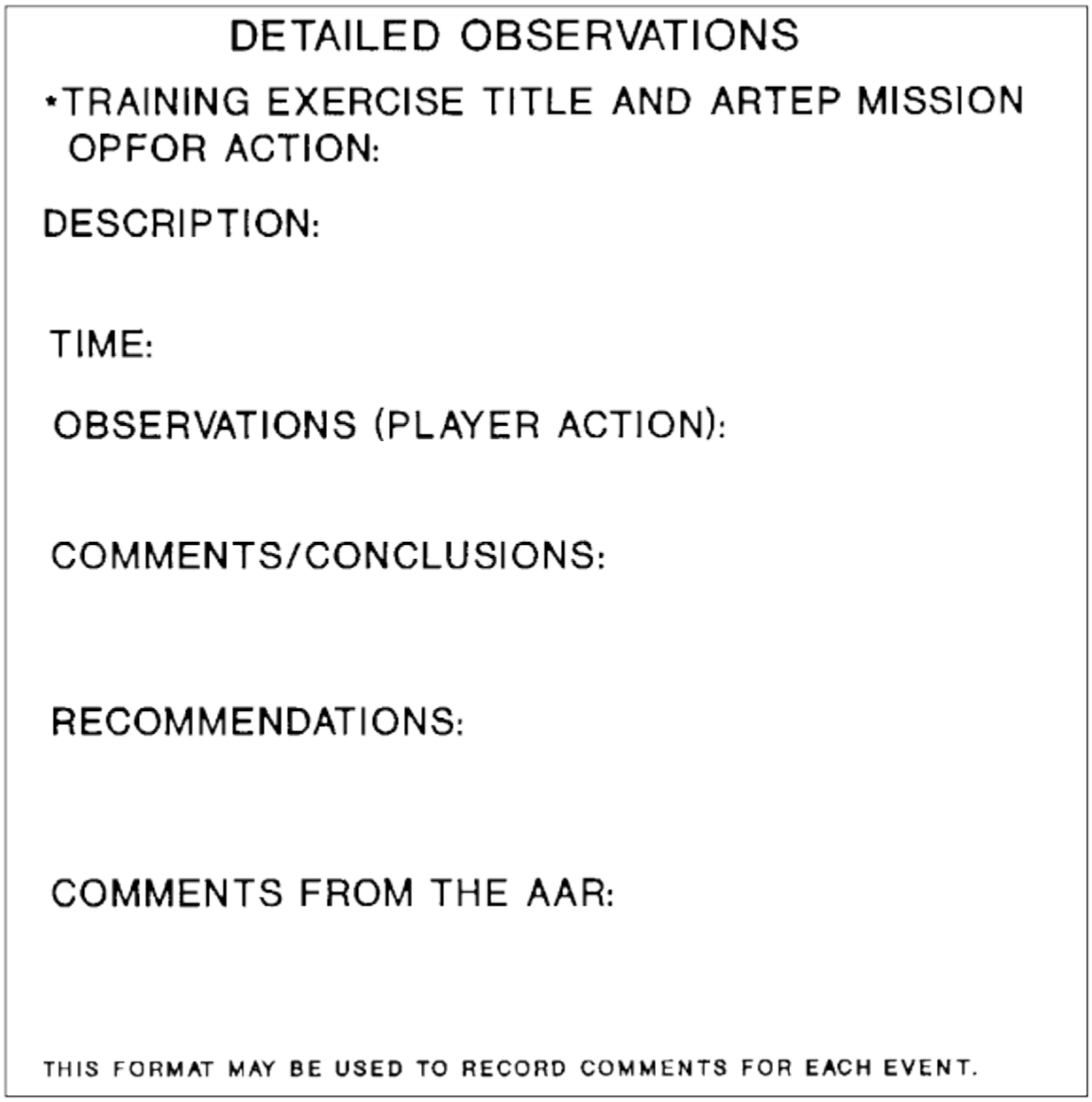


Figure 2-2. Example of an AAR Working Paper

PART C

PLATOON LIVE FIRE STX

(THIS IS A SAMPLE PLATOON LIVE FIRE SITUATIONAL TRAINING EXERCISE)

1. Objective.

This STX trains collective, leaders, and individual tasks in the platoon's operation, Attack.

2. Interface.

This STX is supported by the following battle drill: React to Contact.

3. Training.

a. Guidance. The trainer should review the individual, leader, and collective tasks that are performed during the STX. Determine which tasks may require initial or refresher training.

(1) Individual Training. Individual training should be on the critical soldier's manual tasks required to support this STX. The Collective Task-to-Individual Task Matrix in Chapter 2 of the MTP should be used as a source for these individual tasks. Individual training is based on the tasks, conditions, and standards in the 11B, 11M, and the common tasks soldier's manuals. Training should be hands-on and performance-oriented. During training, leaders assess soldier proficiency by evaluating task performance against the soldier's manual standards, and provide feedback to the soldiers. The individual training and evaluation program includes SDT, common tasks test, and commander's evaluation.

(2) Collective Training. Collective training should be on the critical collective tasks required for this STX. Battle drills and STXs are key tools for squad and platoon collective training. As with individual tasks, drills should be trained to standard with feedback provided, as required. Collective tasks that could support this STX and mission as well as other missions are in the Mission-to-Collective Task Matrix in Chapter 2 of the MTP and the attack outline in Chapter 3.

(3) Leader Training. Leader training should be on the leader tasks required for the exercise as well as the critical individual tasks. Leader tasks are trained in the same manner as stated in paragraph 3a or by one, or all, of the following methods. When materials and facilities are not available, innovation is the answer. Do not limit training to the methods listed.

(a) Classroom discussions on how to plan the exercise and how to implement unit SOPs.

(b) Map reconnaissance that assists in terrain analysis and war-gaming. (Use a map of the area where the STX is to be conducted).

(c) Terrain board or sand table exercises that permit simulations or miniatures to be used to gain three-dimensional perspectives in war-gaming and/or rehearsing the exercise. (Model the terrain board or sand table to match the terrain where the exercise is to be conducted).

(d) Tactical exercise without troops allow leaders to train on the ground, practicing land navigation movement, reporting, and other leader actions.

(e) Simulations and games teach leaders as part of a continuing officer and noncommissioned officer development program.

(f) Training extension courses present information and demonstrate how tasks are performed to standard using audiovisual equipment.

b. Training Tips.

(1) Know the requirements for infiltration (FM 7-70, paragraph 3-5), tactical movement (FM 7-70, paragraph 3-2), and consolidation and reorganization (FM 7-70 paragraphs 5-10 and 8-14).

(2) Conduct a leader's reconnaissance of the training area with squad leaders to ensure that you and your squad leaders do not make time-consuming mistakes.

(3) Review the standards for the T&EOs that support this exercise.

(4) This STX may be conducted using several options.

(a) The exercise may be conducted with ammunition, without ammunition, or live fire. The use of ammunition is encouraged to add more realism to the exercise.

(b) The exercise may be conducted with or without MILES. MILES provides better feedback and should be used if available.

(c) The exercise can be conducted under all environmental conditions, both day and night, with or without NBC. This scenario involves an active NBC environment.

(5) Instructions for this STX are as follows:

(a) This STX should be initially trained and rehearsed slowly, on open terrain, during good visibility, and with frequent explanations and critiques by leaders. This simple execution, combined with a thorough prebrief and "chalk talk" constitutes the "crawl" stage of STX training. The "walk" phase of this STX entails conducting the training at closer to normal rates, on more difficult terrain,

with stops for explanation and critique only when problems occur (except for planned AARs). The STX is executed under conditions as close to those expected in combat as possible for the "run" phase. Full operational security and camouflage, realistic time frames and distances, challenging terrain, and aggressive OPFOR are all needed for the "run" phase. Increased levels of proficiency are then achieved by varying or increasing the conditions of terrain, weather, visibility, OPFOR, NBC environment, and movement distances. This exercise is conducted at full speed after conducting building- block training (individual training drills) to reach the "run" level of execution.

(b) The T&EO standards for this exercise are in chapter 5 of ARTEP 7-8 MTP. These standards must be met to obtain the maximum benefits from the training.

(c) This exercise should be conducted on a recurring basis to sustain proficiency; however, since many of the T&EOs in this STX will be trained in other STXs, practice may occur through integration rather than retraining the STX.

(d) Ideally, the OPFOR replicates enemy forces in size and strength to realistically portray threat activities.

(e) At least one evaluator should be assigned to control OPFOR activities. The evaluator evaluates OPFOR actions, ensures realism, stresses safety, and assesses loss and damage. If the OPFOR is in groups for several simultaneous actions, additional OPFOR evaluators or controllers are necessary.

(f) OPFOR units should look and fight like potential enemy. This assists soldiers in understanding Threat tactics, doctrine, and weapons systems.

c. Training Enhancers. This STX requires the platoon to perform passage of lines, move tactically, overwatch/support by fire, knock out a bunker, and consolidate and reorganize.

(1) When basic proficiency is attained for the tasks in this STX, the STX may be conducted under limited visibility conditions, both with and without NVDs.

(2) This STX can be conducted under increasing MOPP levels as proficiency increases.

d. General Situation.

(1) The exercise is as follows: Contact with the enemy has been reestablished. Initial reports indicate that he is at 65 to 70 percent strength and has not been reinforced. His defensive positions are not well established. He has the capability for indirect fire and CAS. The enemy has used chemicals and will probably do so again. An attack is ordered to prevent reinforcement and establishment of heavily fortified defense in depth. The platoon is acting as part of a larger force and has indirect fire available. Figure 2-3 illustrates the graphic scenario of task performance in this exercise.

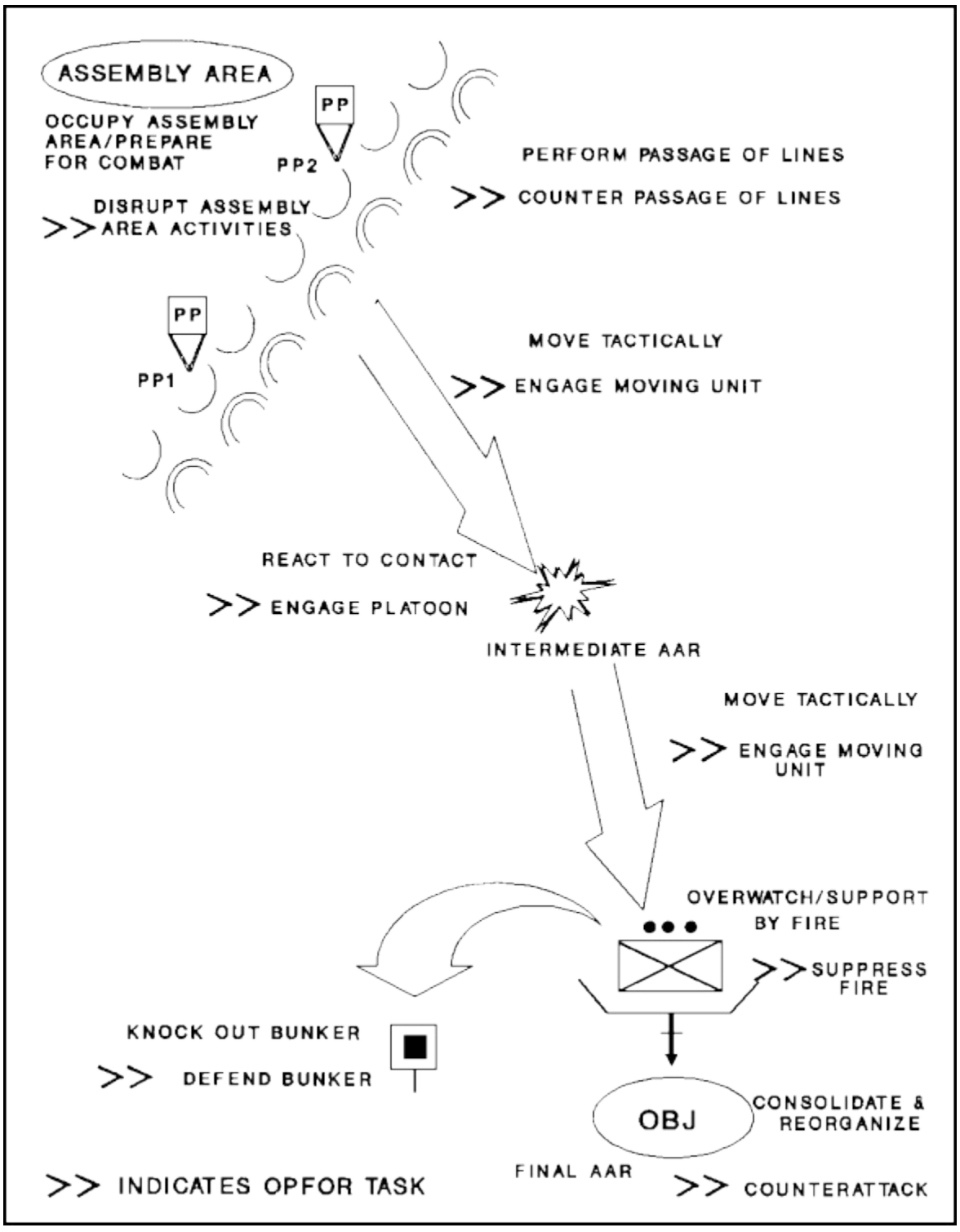


Figure 2-3. Graphic Scenario

(2) This exercise begins with the receipt of a company FRAGO by the platoon and ends after consolidation and reorganization. An AAR should be held after completing the support by fire task and after consolidation and reorganization. A final AAR should be conducted once all evaluation notes are compiled. If necessary, run portions of the exercise again until you are satisfied with your platoon's performance. Figure 2-4 provides a recommended sentence of T&EOs and time for each portion of the STX.

Event	Action	Estimated Time
1	Occupy Assembly Area	1.0 hr
2	Prepare for Combat	2.0 hrs
3	Perform Passage of Lines	30 min
4	Move Tactically	1.0 hr
5	React to Contact	5 min
6	Intermediate AAR	20 min
7	Move Tactically	1.0 hr
8	Overwatch/Support by Fire	2.0 hrs
9	Knock out Bunker	2.0 hrs
10	Consolidate and Reorganize	1.0 hr
11	Final AAR	45 min
*	Maintain Operation Security	
	**Total Time	11 hours

*These tasks are integrated and evaluated throughout the exercise.

**Additional time is required if great portions of the exercise are conducted *at night* or during other limited visibility.

Figure 2-4. STX Sequence

e. Special Situation.

(1) Your platoon is part of a company in a secure assembly area when the platoon receives the following FRAGO to attack. (Figure 2-5)

(2) The company commander has ordered your platoon to lift your supporting fires. A sister platoon is consolidating on the objective when it receives fire from a bunker. The company commander orders your platoon to knock out the bunker.

FRAGMENTARY ORDER

1. SITUATION.

a. Enemy Forces. The enemy is at 60 to 70 percent strength. He is preparing to counterattack. He is expected to use air-delivered or artillery-delivered nonpersistent nerve agent.

b. Friendly Forces. (*Battalion designation*) Infantry attacks (*date/time group*) to destroy enemy forces at Objective _____ to disrupt the enemy counterattack.

2. MISSION. (_____) Company destroys enemy force at Objective DELTA (*grid*) NLT (*date/time*) to prevent the enemy from establishing a heavily fortified defense.

3. EXECUTION.

a. Concept of the Operation. (See overlay.)

(1) Intent. Destroy enemy supply and transport that will support his planned counterattack.

(2) Fire support. Priority of fire to (*another*) Platoon.

b. (*Another*) Platoon.

(1) Main attack to seize Objective _____ (*grid*) and destroy enemy supply trains.

(2) Perform passage of lines using Passage Point 2.

c. (*Evaluated*) Platoon.

(1) Overwatch/support by fire (*another*) Platoon's attack on Objective _____

(2) Perform passage of lines using Passage Point 1.

(3) Be prepared to assume the main attack, on order.

d. (*Another*) Platoon.

(1) Defeat enemy units in your zone of action to prevent reinforcement of or escape from Objective DELTA.

(2) Perform passage of lines using Passage Point 2.

e. Coordinating Instructions.

(1) Company RP is (*grid*).

(2) Company linkup point is (*grid*).

(3) Alternate company linkup point is (*grid*).

Figure 2-5. Attack FRAGO

4. Supports Requirements.

a. Minimum Trainers/Evaluators: This exercise can be conducted by the company commander or platoon leader who will be the trainer and primary evaluator. At least one other controller or evaluator is required with the OPFOR. Another platoon being trained or evaluated should be used as the platoon making the main attack on the supply site. This platoon will need an additional trainer or evaluators

b. Vehicle/Communications: Those organic to the platoon. Two or three vehicles or trailers should be in the OPFOR supply site.

c. Opposing Force: The OPFOR ground force should be at least a reinforced squad.

d. Maneuver Area: A training area with at least 15 by 4 kilometers for infiltration, cross-country movement, and several allocations for supply sites with a bunker is desired. The terrain should offer multiple, covered and concealed approaches to the objective area. Using terrain that limits the leader to a "geographical" or "school solution" does not allow evaluation of the unit's ability to conduct a terrain analysis and select covered and concealed positions.

e. Consolidated support requirements: This exercise requires the items listed in Figure 2-6.

AMMUNITION	DODAC	BASIC LOAD
5.56-mm	1305A080	40 rounds each rifle
7.62-mm	1305A111	150 rounds each M60
5.56-mm	1305A075	200 rounds each SAW
ATWESS cartridge	1370L367	4 (Viper) (for LAW) 3 each Dragon
Hand grenade, body, M69	1330G811	2 each rifleman
Hand grenade fuze (practice)	1330G878	2 each rifleman
Simulator, Projectile, ground burst MILSA2	1370L594	20 each exercise
Simulator, hand grenade, M116-series	1370L601	20 each exercise

OTHER ITEMS	
Batteries	
BA 200 (6-volt)	12 each
BA 3090 (9-volt)	140 each

MILES EQUIPMENT	PLATOON	EVALUATORS	OPFOR
M16 system	32		15
M60 machine gun system	3		1
Controller guns		2	
Small-arms alignment fixture		1	

Figure 2-6. Support Requirements

5. T&EO Sequence.

Figure 2-7 lists the T&EOs, in Chapter 5, MTP 7-8 used for evaluating this STX.

TASK/FUNCTION	TASK NUMBER	PAGE
Occupy Assembly Area	7-3/4-1022	5-46
Prepare for Combat	7-3/4-1046	5-158
Perform Passage of Lines	7-3/4-1040	5-61
Move Tactically	7-3/4-1025	5-49
Overwatch/Support by Fire	7-3/4-1007	5-9
Knock Out Bunker	7-3/4-1012	5-17
Consolidate and Reorganize	7-3/4-1047	5-167
Maintain Operation Security	7-3/4-1057	5-141

Figure 2-7. T&EOs

Lesson 2

Practice Exercise

Instructions The following items will test your understanding of the material covered in this lesson. There is only one correct answer for each item. When you have completed the exercise, check your answers with the answer key that follows. If you answer any item incorrectly, review that part of the lesson which contains the portion involved.

Situation: You are the assistant S3 of an infantry battalion. Your unit is presently preparing for a battalion Field Training Exercise. In addition, to planning the FTX, the S3 has also told you to review each of the companies live fire platoon Situational Training Exercises.

1. One major advantage of an FTX (over an STX) is that the FTX provides training in

   ○ A. live fire activities, not featured in STXs.

   B. a high-cost, high-overhead environment.

   C. employment of organic and attached assets.

   D. staff coordination and interaction.

2. Complete the following statements: FTXs are used to train the commander, staff and subordinate units to

   - move units .
   - employ effectively.
   - build and .
   - plan fires.
   - plan and coordinate operations.

3. Planners and conductors consider an FTX in three phases, which are:

   A. Pre-exercise, execution, and post-exercise.

   B. STARTEX, EX, and ENDEX.

   C. Planning, execution, and debriefing.

   D. Front-end, on-board, and back-end.

4. If you are serving as chief controller for a company level FTX, you would normally assume the role of the

    A. OPFOR (opposing force) commander.

    B. battalion commander.

    C. battalion S3.

    D. battalion XO.

5. The primary purpose of the AAR, at the end of an FTX, is to

    A. coordinate requirements for terminating the FTX and allow all parties to consolidate and prepare for return to home station.
    B. facilitate preparation of maneuver damage reports and other required administrative documents.
    C. account for equipment, weapons, and personnel, prior to departing the training area.
    D. allow for an exchange of training related information between all parties involved in the FTX.

6. An STX plan should consist of a , , , , and .

7. An STX will most likely become a failure if

    A. it is reduced to a TEWT.

    B. the unit cannot perform T&EO subtasks.

    C. it immediately follows battle drill training.

    D. past "lessons learned" serve as basis for the training.

8. In order to determine individual training requirements, necessary to prepare for a particular STX, the best reference is the

    A. applicable field manuals.

    B. Mission Training Plan.

    C. Soldier's Manual.

    D. Mission Essential Task List.

9. A productive after action review

    A. identifies the strong and weak points of the player unit.

    B. provides a forum for discussing actions, results, and alternatives.
    C. compares a unit's capabilities and limitations with those of like units.
    D. allows leaders to assess the fighting capability of units.

Practice Exercise
Answer Key and Feedback

Situation: You are the assistant S3 of an infantry battalion. Your unit is presently preparing for a battalion Field Training Exercise. In addition, to planning the FTX, the S3 has also told you to review each of the companies live fire platoon Situational Training Exercises.

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   A. live fire activities, not featured in STXs.

   B. a high-cost, high-overhead environment.

   C. employment of organic and attached assets.

   D. staff coordination and interaction.

2. Complete the following statements: FTXs are used to train the commander, staff and subordinate units to

   - move and/or maneuver units realistically.
   - employ organic weapon systems effectively.
   - build teamwork and cohesion.
   - plan and coordinate supporting fires.
   - plan and coordinate logistical activities to support tactical operations.

3. Planners and conductors consider an FTX in three phases, which are:

   A. Pre-exercise, execution, and post-exercise.

   B. STARTEX, EX, and ENDEX.

   C. Planning, execution, and debriefing.

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   B. facilitate preparation of maneuver damage reports and other required administrative documents.
   C. account for equipment, weapons, and personnel, prior to departing the training area.
   D. allow for an exchange of training related information between all parties involved in the FTX.

6. An STX plan should consist of a Heading, Objective, Interface, Training, Support Requirements and T&EO Sequence.

7. An STX will most likely become a failure if

   A. it is reduced to a TEWT.

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